

# Natural Gas Line Extension & Service Standards 2016 Revision Table

(To the 2015 Natural Gas Line Extension and Service Standards)

CHAPTER	TITLE	REVISION DESCRIPTION AND RATIONALE
1.01	Purpose	Added a reference to the Colorado Springs Utilities Guide for Development and Building. This was done to provide customers with additional information and resources.
1.03	Excavation and Boring Requirements near Utility Lines	Added Colorado 811. This is the “marketing name” of UNCC.
Ch 1 Forms	Forms – Request for Removal of Utilities – Demolition or Construction	Form updated with changes made to water and wastewater sections. No changes made related to natural gas.
2.01	Introduction	Added sentence to indicate that mainline facility cost allocation information is found in the URRs. Added for clarification.
2.02c	Location & Clearances of Gas Main Lines	Moved service line clearance information to 4.03c. This was done as Ch 4 is the service line chapter.
2.05	Construction	Added requirement for frequency of density tests. Must be taken a minimum of every 250 linear feet of gas/joint/electric mainline trench and at each service stub installed, and increased as directed by the CSU Gas Construction Inspector. This is consistent with City requirements.
Ch 2 Forms	Application for Gas Service Line Approval	Updated the form in GLESS to what has been used for several years but was not included with prior updates. Also now matches the text that requires the application to Field Engineering be made for gas service line approval when the new gas service exceeds 1,000,000 BTU.
Ch 2 Forms	QC Inspection Sheet	Added QC inspection sheet to GLESS that has been used since 2003.
Ch 2 Forms	Utility Staking Standards (New Residential)	Changed the requirement to grade at the transformer, J-box and vaults to within +/- 3” of sub-final grade (was 2”). Change made at the request of Field Engineering and the Gas Construction QC Inspectors. The Gas Construction QC Inspectors also requested the title be changed to include commercial and that the form be completed before construction starts.
Ch 2 Forms	Utility Staking Standards (Verification Form)	Spelling correction made to the form.
Ch 2 Forms	Economically Feasible Extension Contract	Corrected the Economically Feasible Extension Contract in GLESS. It has been used By Field Engineering and Customer Contract Administration since 2009.
Ch 2 Forms	Not Economically Feasible Extension Contract	Corrected the Not Economically Feasible Extension Contract in GLESS. It has been used By Field Engineering and Customer Contract Administration since 2009.

<b>Ch 2 Forms</b>	Single Parcel Refund Contract	Corrected the contract to what is currently being used by Customer Contract Administration.
<b>Ch 2 Forms</b>	Mainline Facilities Refund Contract	Corrected the contract to what is currently being used by Customer Contract Administration.
<b>3.02b(2)b</b>	Utility Service Installer License Process	Text modified to indicate that there are four Utility Service Installer Knowledge, Skill and Licensing assessments scheduled each calendar year and that the LUSI is required to monitor the expiration of their license. Change was made to make it consistent with other text that indicates that there are four scheduled assessments.
<b>3.02b(4)g</b>	Fees	Removed text to require that 2" risers shall be welded steel risers fabricated by the Machine Weld Shop. This change was made to allow for the use of 2" anodeless risers.
<b>4.03a</b>	Summary	Changed text to require that risers larger than 2" shall be welded steel risers. This change was made to allow for the use of 2" anodeless risers.
<b>4.03c</b>	Service Line Clearances	Moved service line clearance information from 2.02c to 4.03c. This was done as Ch 4 is the service line chapter.
<b>4.03c</b>	Service Line Clearances	Listed the 2'-6" separation agreed to in 2015 as an exception, similar to how other parts of GLESS are written with regards to exceptions. Formatting change was made but no changes to content.
<b>4.03f</b>	Leak Test Requirements	Edited to clarify the leak test duration requirements for services 2" and smaller. These requirements became effective early 2015 based on guidance from the Gas Piping Technology Committee. All gas service lines 2" diameter and smaller shall be leak tested for a minimum of 15 minutes for lengths less than or equal to 200' prior to tie-in. For pipe lengths greater than 200' air test for 15 minutes for every 200 feet in length (e.g., 201' to 400' test for 30 minutes; 401' to 600' test for 45 minutes, 601' to 800' test for 1 hour, etc.).
<b>4.04a12</b>	Inspections	Text modified to indicate that the use of more than 2 socket heat fusion couplings is only allowed with approval of the CSU inspector if the service line exceeds 500 feet or with extenuating circumstances as determined by the CSU inspector. This has been a requirement but was emphasized as there were some instances where external compliance with this requirement became an issue.
<b>4.05b(4)</b>	Meter/Riser Manifolds	Changed text to indicate that <u>all</u> welded gas risers shall be field wrapped (removed 2" and other)
<b>4.05c(1)f</b>	Above Ground Multiple Meter Manifolds	Text added that house lines shall be secure and level. Change made to emphasize this requirement and decrease issues in the field.
<b>4.05d(3)c</b>	Meter Set Location	Added discussion on the allowance of construction heat and meter with approval of System Design and Field Measurement Services. There are a limited number of situations when this comes up so text was added to address this challenge.
<b>4.05d(3)d1)e</b>	Primary Structure	Text added to indicate that gas meter loop locations will be located where there is minimum slope between the riser and house line. Emphasis was added on this requirement due to issues in the field with some installations. In addition retaining walls, enclosures, and landscaping or other obstructions may be required to be removed or trimmed so it does not interfere with the operation of the meter or associated piping (create a safety hazard or access issue). Emphasis was added on the obstructions and access issues due to some recent issues encountered with these items.

<b>4.05d(3)c)1)m</b>	Primary Structure	Text added to discuss and clarify gas load tie ins. They must be located outside of the CSU meter loop and the bypass will not be accepted as a tie in point.
<b>4.05d(4)c</b>	Additional Requirements	Revised paragraph to include exceptions to master meter systems that must be approved by Field Engineering. Also included discussion on a master-metered customer and check metering tenants.
<b>4.06b</b>	Risers	Changed text to require that risers larger than 2" shall be welded steel risers. This change was made to allow for the use of 2" anodeless risers.
<b>Appendix A</b>	Colorado Springs Utilities Service Area Maps	Updated boundary maps with latest information (R. Brewster and S. Clark 8/28/15).
<b>Appendix B</b>	Utilities Addressing Plan, Utilities Design CAD File and Easements Policies and Procedures	Updated Appendix B text (per R. Brewster 8/25/15)
<b>Appendix-C: Table 7</b>	Materials Approved for Use in Gas/Joint Service Line Construction	Service Riser designation column modified to allow for 2" anodeless risers. 2" UV resistant tapecoat that has been in use for at least 3.5 years by CSU was added to list of approved tapes. Removed padding/bedding sand approved manufacturers that no longer supply the material nor quality of material needed for bedding.
<b>Appendix-C: Table 8</b>	Clearance Matrix for Typical CSU Underground Utilities	Added note to address 1" radial separation between gas and electric when in a joint trench. Removed references to the water drawings A7-9 and A7-10. Added gas service clearance information. Added "private" and "CSU" to notes regarding telecommunication and fiber optics to clarify how to apply those notes. Added the requirement for 5' separation from metallic gas main to electric primary
<b>Appendix-C: Table 9</b>	Clearances of CSU Electric Facilities from Hazardous Natural Gas Locations	Removed table as most applies to electric standards. The remaining text that applies to natural gas is found in 4.05d)3)c)1)l (distances between electric and gas meter, regulator, and meter piping).. Note: tables renumbered after removing Table 9.
<b>Appendix-D: Figure 5</b>	Service Riser	Changed text to indicate 2" anodeless risers are allowed and showed taping of risers. Modified note 1 to indicate all welded risers shall be fabricated by CSU.
<b>Appendix-D: Figure 8</b>	Typical Meter Sets	Edits made to figures to show acceptable/not acceptable locations as tie in points for added gas loads. Edits made to address issues observed in the field with tie in locations.
<b>Appendix-D: Figure 14</b>	Required Air Pressure Test Gauge & Blow Down Assembly	Added for the benefit of LUSIs a new drawing to show the required air pressure test assembly that all licensed utility service installers will need to have in place when installing 1 1/4" or 2" welded steel or anodeless gas service risers.
<b>Phone Numbers and Contact Information</b>	Phone Numbers and Contact Information	Updated contact information, including Service Area Map Contacts with revised North Field Engineer Areas and Ben Schmitt's area. call before you dig listed as Colorado 811/UNCC. Indicated they need 3 business days notice.
<b>All</b>	668-7354	Number for Field Services changed to 668-7350 in document.
<b>All</b>	Field Services and Gas Construction Quality Control Inspections	Edited throughout the document the references to Colorado Springs Utilities Field Services and Gas Construction Quality Control Inspections as sometimes they were called by other titles

# CHAPTER 1

## General Information

### 1.01 Purpose

These standards are issued by Colorado Springs Utilities as requirements for obtaining gas service and gas main line extensions and to put forth the service available, conditions for service, and the standards for material and construction. The requirements of the chapter text, tables and drawings apply. The standards herein supersede all previous publications of those standards issued by Colorado Springs Utilities prior to this date and are subject to change without notice.

These standards are provided to assist customers, architects, engineers, contractors, developers, and Licensed Utility Service Installers (LUSI) in planning and applying for gas service from Colorado Springs Utilities. These regulations and policies serve to provide safety guidelines for new service lines and main extensions and procedural direction to expedite service connection by establishing uniform standards for gas service. Because no set rule or instruction will address all conditions, the Colorado Springs Utilities Construction and Maintenance Department will provide clarification of requirements and standards concerning special customer needs or unusual construction and installation conditions. [An additional general development guidance document available as a resource to address utilities is the Colorado Springs Utilities Guide for Development and Building found online at https://www.csu.org/CSUDocuments/developmentguide.pdf](https://www.csu.org/CSUDocuments/developmentguide.pdf)

Any contractor requesting natural gas service from Colorado Springs Utilities is responsible for providing copies of the most recently published specifications to potentially affected subcontractors and bidders responding to solicitations involving work related to new gas service lines. Copies of this manual are available online [www.csu.org/Pages/standards-bulletins.aspx](http://www.csu.org/Pages/standards-bulletins.aspx) or from:

Colorado Springs Utilities  
Gas Line Extension & Service Standards  
1521 Hancock Expressway (Mail Code 1812)  
Colorado Springs, CO 80903

### 1.02 General Policy Information

- a) The standards herein are supplementary to, and are not intended to conflict with, the rules and regulations on file with the City Clerk of the City of Colorado Springs or applicable city ordinances.
- b) As a condition of service, the customer will give the duly authorized agents and employees of Colorado Springs Utilities, when properly identified, full and free access to the premises of the customer at all reasonable hours. This access will be for the purpose of installing, reading, inspecting, adjusting, repairing, maintaining, replacing or removing any of Colorado Springs Utilities facilities on the premises of the customer or for any other purpose incidental to the gas service supplied by Colorado Springs Utilities.
- c) Employees of Colorado Springs Utilities may not demand nor accept any compensation from a customer for services rendered in the line of duty. However, certain employees do

shall be retested in accordance with the requirements of Section 406.4 of the International Fuel Gas Code, 2009 Edition.

*NOTE:* Swimming pool gas meters that have been disconnected are only required to be tested if off for more than one calendar year.

- l) For removal of utilities from a property for demolition or construction purposes, the customer must submit to Colorado Springs Utilities a "Request for Removal of Utilities for Demolition or Construction" (see end of chapter for request form).
- m) Customer owned equipment shall not be physically attached to a Colorado Springs Utilities meter. Any customer equipment found attached to a Colorado Springs Utilities meter will be removed.

### **1.03 Excavation and Boring Requirements near Utility Lines**

- a) Chapter 19, Article 5 of Part 2 of the City Code governs excavations in the City and applies to any opening in the surface of a "public place" made in any manner whatsoever. "Public place" is defined to include any public right of way, utility easement, drainage structure, street way, place, alley, sidewalk, park, square, plaza, or any similar public property owned or controlled by the City and dedicated to public use, including dedicated, but not improved streets or portions of streets. Even though many references are made to the "Code for the City of Colorado Springs", by inclusion in our service standards, and to ensure the health and well being of the general public, these excavation requirements apply to all excavations around Colorado Springs Utilities' facilities throughout our Dedicated Service Territories.

Any boring operations underneath the surface of a public place are considered excavation upon a public place and are covered by City Code. The City's requirements for excavation are:

- 1) The first requirement is set out in City Code section 3.3.202 EXCAVATION LICENSE REQUIRED, which provides that "No person shall make any excavation or fill any excavation in any public place without first obtaining a license and permit for the excavation except as otherwise provided in this article". Pursuant to this section of the City Code, the Deputy Licensing Officer may issue cease and desist orders or initiate license suspension or revocation proceedings against any excavator for a violation of the City Code excavation provisions or of the City's General Licensing Code.
- 2) The second requirement, obtain locations of the underground utilities, is set out in the City Code at section 19.5.211 and by Colorado statute at CRS 9-1.5-101, et. seq. C.R.S. 9-1.5-101, et seq, governs excavation requirements throughout the State of Colorado. That statute requires notification to utility companies and the marking of underground facilities prior to excavation, and provides for civil penalties. The City Code states that no excavation shall take place until location of the facilities has been requested and obtained not more than five working days prior to the excavation. Colorado Springs Utilities must be notified prior to any construction activities around utility lines and or facilities. The proper way to notify Colorado Springs Utilities is through the statewide "One Call" notification system. The statewide "one call" notification system is the Utility Notification Center of Colorado ([Colorado 811](#)) which can be reached at 1-800-922-1987 or 811. Colorado Springs Utilities will bill for the cost of repair to its



**REQUEST FOR REMOVAL OF UTILITIES - DEMOLITION OR CONSTRUCTION**

Property Address\*: \_\_\_\_\_

*\*a single application may be submitted for bus shelters, traffic signals or multiple properties of one owner with a separate attachment of additional addresses*

Property Use: Residential  Commercial

Property Owner: \_\_\_\_\_ Phone: \_\_\_\_\_

Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_

Notify Upon Completion of Utilities Removal: Owner  Contractor

Notes: \_\_\_\_\_

- Requested Services for Removal:
- Electric
  - Transformer
  - Gas
  - Water
  - Wastewater

**The Owner/Agent understands and agrees as follows:**

Owner/Agent requests that Colorado Springs Utilities' (Utilities) electric, natural gas, water and/or wastewater services servicing the property be disconnected prior to proposed demolition or construction.

\_\_\_\_\_ (the undersigned) hereby warrants that he/she is the  Owner or  Duly Authorized Agent of the Owner (either is referred to herein as "Owner/Agent") of the above described property and hereby authorizes Utilities to remove all requested electric, natural gas, water, and/or wastewater services to the above described property and to execute such work as may be necessary to insure the integrity of Utilities' systems and the safety of all concerned. Owner/Agent agrees at his/her expense to meet all Utilities' requirements, including but not limited to those standards and authorized procedures for removal of said utilities. Such standards may be obtained at [www.csu.org/business/development\\_services/utility\\_specifications](http://www.csu.org/business/development_services/utility_specifications).

*(The utility removals are typically completed in 5-10 business days, however, emergency service requirements may affect scheduling.)*

**ELECTRIC**

**Commercial Electric Service:** After Utilities has disconnected service from Utilities' side of the transformer, the Owner/Agent will have a licensed Electrician remove the Commercial Electric service wires from the secondary bushings at the transformer. This must be performed before any construction or demolition activities to protect the secondary bushings from damage.

**Residential Electric Service:** Utilities will remove the Residential Electric service wires from the transformer.

**NATURAL GAS**

Utilities will disconnect and cap the Natural Gas service line at or as close as possible to the property line.

**WATER (Please check one)**

- Service line to be reused:** If the water service line will be reconnected, Utilities will shut off of the water service line at the curb stop (at or near the property line). Any service reconnection must be in compliance with Utilities' Line Extension and Service Standards.
- Service line not to be reused:** If the water service line is not to be reconnected or reused, then the water service line and tap shall be removed by Owner/Agent back to the water main in accordance with Colorado Springs Utilities' Line Extension & Service Standards for Water. If Utilities is required to remove the service line and tap, Utilities will invoice the Owner for all removal costs and main line repairs on a time and materials basis; and Owner/Agent will pay any such invoice within thirty (30) days of receipt.

**WASTEWATER (Please check one)**

- Service line to be reused:** If the wastewater service line will be reconnected, Owner/Agent will have a Licensed Excavator remove and cap (water tight) the wastewater service line servicing the property seven (7) feet inside of the property line. A Utilities' Service Line Inspector will inspect the capping of the wastewater service line. Inspection fees will be paid by the Owner/Agent to Utilities in accordance with Colorado Springs Utilities' Tariff. Any service reconnection must be in compliance with Utilities' Line Extension and Service Standards and may require CCTV inspection to confirm the integrity of the service line.
- Service line not to be reused:** If the wastewater service line is not reconnected or reused, then the wastewater service line and tap shall be removed by Owner/Agent back to the wastewater main. If Utilities is required to remove the service line and tap, Utilities will invoice the Owner/Agent for all removal costs and wastewater main line capping on a time and materials basis; and Owner/Agent will pay any such invoice within thirty (30) days of receipt.

**GENERAL PROVISIONS**

The term "reconnection" as used in this Request for Removal of Utilities applies only when no alterations to the existing service connection points are required either by Owner/Agent or by current Utilities' Line Extension and Service Standards. If for any reason it should become necessary to reinstall or reconnect any of the utility services that have been disconnected pursuant to this Request for Removal of Utilities or if such services later appear to have been wrongfully removed or discontinued at the Owner/Agent's request, the Owner/Agent agrees to indemnify and hold harmless Colorado Springs Utilities from any and all claims arising from the removal or discontinuance of said services and to promptly reimburse Colorado Springs Utilities for any and all costs or expenses incurred to reinstall or reconnect such services and any other applicable fees. Colorado Springs Utilities shall not be liable for delays in performing its obligations to the extent the delay is caused by an unforeseeable condition beyond its reasonable control without fault or negligence including strikes, riots, wars, floods, fires, explosions, acts of nature, or labor disturbances. This Request for Removal of Utilities is subject to the applicable provisions of the City Charter, City Code, ordinances, rules and regulations of the City of Colorado Springs as amended as well as applicable provisions of Colorado Springs Utilities' Tariff, as now in effect or hereafter amended. The laws of the State of Colorado will govern this Request for Removal and any interpretation or construction thereof. Owner/agent acknowledges that Colorado Springs Utilities is afforded protections of the Colorado Governmental Immunity Act, C.R.S. §24-10-101, *et seq.*

**Additional Fees:** Owner/Agent understands that there may be additional fees to reconnect utility service to the above described property and will pay any fees required.

Owner/Agent Signature \_\_\_\_\_ Address \_\_\_\_\_

State of Colorado )  
County of El Paso )

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, By \_\_\_\_\_  
*(Printed name of owner/agent)*

\_\_\_\_\_  
Notary Public My commission expires: \_\_\_\_\_

*Application may be submitted electronically, by mail or in person.*

*(For Colorado Springs Utilities Completion)*

Premise ID: \_\_\_\_\_ Bill ID: \_\_\_\_\_ Fees: \_\_\_\_\_  
Paid  Billed

Additional Information: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Electric Service : \_\_\_\_\_ Date: \_\_\_\_\_

Natural Gas Service : \_\_\_\_\_ Date: \_\_\_\_\_

Water Service : \_\_\_\_\_ Date: \_\_\_\_\_  
Place of removal:  Curb stop  Water main

Wastewater Service : \_\_\_\_\_ Date: \_\_\_\_\_  
Place of removal:  Capped 7 ft. inside Property Line  Wastewater main

Completed and Customer Contacted: \_\_\_\_\_ Date: \_\_\_\_\_

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## CHAPTER 2

### Gas Main/Service Stub Extension

#### 2.01 Introduction

This chapter explains the process for extending gas main lines and service stubs to sites within the Colorado Springs Utilities Gas Certificated Service Territory and covers the steps an Applicant will go through when requesting a main line extension. The chapter also explains Colorado Springs Utilities current extension and refund policies and associated extension and refund contracts as provided for in the Natural Gas Tariff. The application forms, sample contracts, and refund calculations can be found at the end of this chapter.

The process for extending gas service includes the following steps:

- a) Submittal of **Application for Gas & Electric Line Extension** including required plans and information requested on application form
- b) Preparation of **Design** and **Cost Estimate** by Colorado Springs Utilities Field Engineering Staff
- c) Determination of type and preparation of Extension Contract with specified Design Fee
- d) Execution of **Extension Contract** by Applicant
- e) **Construction** by Colorado Springs Utilities
- f) Execution of **Refund Contract** by Applicant, *only if* Extension Contract is determined to not be economically feasible by Colorado Springs Utilities
- g) Installation of **Service Lines** by Licensed Utility Service Installer (LUSI)
- h) **Meter Set** installations by Colorado Springs Utilities
- i) **Refunds** by Colorado Springs Utilities

The line extension process begins when the Applicant submits an **Application for Gas & Electric Line Extension** and all required plans and information to Field Engineering. Colorado Springs Utilities then prepares a design and estimate, and notifies the Applicant of the estimated cost of construction plus the specified, non-refundable, design fee. [The Utilities Rules and Regulations detail the cost allocation of mainline facilities.](#) Contracts for economically feasible extensions, as determined by Colorado Springs Utilities, will require the advancing of a percentage of the total estimated extension cost plus the specified design fee, as a non-refundable payment as described in the current tariff. The Applicant will remit the non-refundable sum and execute the Extension Contract. No Refund Contracts will be executed on economically feasible extensions. All other Applicants will advance 100 percent of the estimated cost of construction to Utilities plus the specified non-refundable design fee and execute the Extension Contract. After completion of construction, Colorado Springs Utilities



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will determine the actual costs of construction and either charge (or refund without interest) the difference between the estimated and actual costs of construction. Once all amounts due to Colorado Springs Utilities are paid, the Applicant will be entitled to execute a Refund Contract. Colorado Springs Utilities constructs the gas mains, service stubs and associated facilities. The Builder contracts with a LUSI to construct the service lines from the service stubs to the buildings (i.e. on the Applicant's private property). The gas meter is set, and Colorado Springs Utilities refunds the Applicant for each new meter set (i.e. new service connection) under the terms of the executed Refund Contract.

## 2.02 Application

The Applicant initiates the line extension process by submitting an **Application for Gas & Electric Line Extension**, as well as the required plans for design and construction. The application is a standard form provided by Field Engineering that captures pertinent information about the Applicant and the requested extension. A copy of the Application is included at the end of this chapter and online at [www.csu.org/Pages/development-files-forms.aspx](http://www.csu.org/Pages/development-files-forms.aspx).

### a) Required Plans:

Along with the application, the Applicant must submit the following plans: water plans, street plans and profiles showing the location and elevation of sanitary and storm sewer lines, service stub plans showing the planned location of utility service stub lines into each lot, and a recorded plat. The Applicant may submit a request without a recorded plat. However, construction will not begin until the Applicant has submitted a recorded plat or an appropriate easement document granting the required right-of-way to Colorado Springs Utilities.

**Please Note:** Unless the Applicant is extending gas service in existing streets, a **Utilities Addressing Plan (UAP) and/or Utilities Design Cad File (UDCF) must be submitted to the Colorado Springs Utilities Facility Information Management Systems (FIMS) Office before any action will be taken on a line extension request.** The UAP/UDCF requirements are included in Appendix B of this document. For more information about UAP/UDCF, please call the Colorado Springs Utilities FIMS office (see Phone Section).

### b) Private Streets:

For projects with private streets, including most apartment, condominiums, townhouse and commercial projects, the Applicant must also submit site development plans, master facilities plans, and landscaping plans. The Applicant should also pay special attention to the separation requirements discussed in 2.02(c) "Location of Gas Main Lines", since private streets are typically narrower and thus more challenging to provide required utility separations.

### c) **Location & Clearances** of Gas Main & Service Lines:

The location of water, electric, sanitary sewer, storm sewer and other underground facilities must provide adequate separation for gas facilities (see Table 8 for Clearance Matrix; [See 4.03c for Service Line Clearances](#)). At time of installation, typical depths of gas main lines

are installed, from top of pipe to grade, between 30 inches minimum and 48 inches maximum for  $\leq 76$  psig gas mains, and between 48 inches minimum and 72 inches maximum for 150 psig gas mains.

1) Gas main lines should have the following minimum separations:

- a) Minimum 6 foot horizontal separation when installed parallel to other utilities and structures.

***EXCEPTION:*** Hillside Minor Residential Streets – Minimum 5 foot horizontal separation.

- b) Minimum one foot of vertical separation when crossing other utilities.
- c) Minimum one foot radial separation when gas, electric, and communication lines are approved to be in the same trench.

2) Gas main lines operated at 150 pounds per square inch gauge (psig) must be approved by Colorado Springs Utilities Energy Construction Operations and Maintenance Department and should have the following separations:

- a) Minimum 10 foot horizontal separation when installed parallel to other utilities and structures.
- b) Minimum 5 foot vertical separation when crossing other utilities.
- c) Minimum 4 foot cover required.

~~3) Gas service lines should have the following minimum separations:~~

- ~~a) Minimum 3 foot horizontal separation from property lines, above or below ground structures, and/or other utilities.~~
- ~~b) Minimum 2' 6" (30 inch) horizontal separation from property lines, above or below ground structures, and/or other utilities, shall only be allowed where and when residential structures are built on a 5 foot setback from the side property line (distance of 5 feet between the side wall of the structure and the side property line). See Figure 4.~~
- ~~c) Minimum one foot vertical separation when crossing other utilities.~~
- ~~d) Minimum 24 inch cover required.~~

***Note:** separations are measured from the outside diameters of the utility lines.*

d) Easements:

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The Applicant must also submit an acceptable utility easement for private streets and right-of-ways. A standard easement document form is available online at [www.csu.org/Pages/development-files-forms.aspx](http://www.csu.org/Pages/development-files-forms.aspx), or through Colorado Springs Utilities Field Engineering, and should be submitted with the line extension application as necessary.

## 2.03 Design and Estimate

Upon receipt of the **Application for Gas & Electric Line Extension** and all required plans, Colorado Springs Utilities will begin designing the new gas facilities and estimating the cost of installing these facilities. There will be a specified design fee assessed for this work. Projects are prioritized according to how close they are to being ready for construction of gas facilities. Gas facilities are installed in a joint trench with electric or after all other utilities are installed and the curb and gutter is constructed. Application for line extensions should be made as early as possible in the development process to assure adequate time for design and estimate.

## 2.04 Execution of Extension Contract

After the design and estimate are completed, the Applicant receives copies of each, plus a copy of the applicable Extension Contract along with a letter requesting execution of the contract and remitting either the percentage of the estimated cost of construction, as described in the current tariff, plus the specified design fee or 100 percent of the estimated cost of construction plus the specified design fee to Colorado Springs Utilities. The estimated cost of construction for oversized facilities is based on a nominal pipe size. The Extension Contracts detail the terms under which the new gas facilities will be constructed. Samples of both Extension Contracts are included at the end of this chapter.

## 2.05 Construction

Gas mains and service stub facilities may be constructed only by Colorado Springs Utilities or by Colorado Springs Utilities gas contractor. The onsite geotechnical company, developer, or the developer's representative shall be responsible for promptly and consistently providing a copy of all completed soil compaction test results that are taken on any and all new construction projects where the gas and/or electric utilities are or have been installed by Colorado Springs Utilities or its designated contractor. The frequency of density tests shall be a minimum of every 250 linear feet of gas / joint / electric mainline trench and at each service stub installed. The number of density tests may be increased if directed by the Colorado Springs Utilities Gas Construction Quality Control Inspector. If flowable fill is installed compaction and density tests are not required. These soil compaction test results shall be furnished to the onsite Colorado Springs Utilities Gas Construction Quality Control Inspector~~onsite representative~~ immediately upon the completion of said soil compaction tests and prior to the installation crew leaving and/or moving off the development, subdivision, or jobsite. This is to ensure that any soil compaction test failures or issues that may exist can be remedied prior to the crew moving off or leaving the jobsite.

### a) Construction Scheduling:

Construction of new gas facilities is scheduled after the Applicant has executed an Extension Contract, remitted the appropriate fees and prepared the site for construction. The site is

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Cementing, Colorado Springs Utilities will directional bore the gas crossing during the standard scheduled crew installation. The cost for the boring will be estimated and applied to the Mainline Extension contracts at the time of the design.

4)

5) The use of sleeves for crossings is not allowed, due to safety and maintenance issues- a gas leak can be difficult or impossible to detect and locate with leak search equipment, and gas would be forced onto customer properties. In addition, sleeves do not allow pipe closure for repairs.

#### **d) Request for Colorado Springs Utilities to Work Overtime:**

Developers or other customers may request for a Gas or Electric Extension Crew (Colorado Springs Utilities/Contractor) to work overtime (OT) on their projects. Colorado Springs Utilities (CSU) reserves the right to select the crew based on operational and contractual obligations.

The Developer or other customer must submit to CSU Field Engineering a T&M Overtime Request Letter with relevant information filled in (see form at the end of this chapter). These request letters are also available from CSU Colorado Springs Utilities Gas Construction Quality Control Inspectors, CSU Colorado Springs Utilities Crew Supervisors or CSU Colorado Springs Utilities Field Engineering representatives.

If an overtime request is approved (contingent upon crew availability), CSU Colorado Springs Utilities Field Engineering will create a Flat Rate T&M contract.

All monies for OT work that is requested and approved must be collected before construction can start, without exception. The Developer or customer must know and make payment for hours of OT the crew will work. There will be no reconciliation after the project and crews will only work for hours paid in full. Therefore, the precise number of hours to be worked needs to be known at the time of the request.

Field Engineering can supply the hourly crew rate (adjusted annually in May) that will cover the total labor rate for the crew to include typical equipment used.

If special conditions exist that require extra personnel or specialized equipment for construction CSU Colorado Springs Utilities Field Engineering may apply additional charges to the flat rate.

The money received by CSU Colorado Springs Utilities Field Engineering will be deposited as Aid to Construction at the respective Field Engineering office. Call CSU Colorado Springs Utilities Field Engineering with any questions (see Phone Section).

## **2.06 Final Costs & Execution of Refund Contracts**

After the new gas facilities are constructed and the actual cost of construction is calculated on projects that are not considered economically feasible, the Applicant receives a copy of the Refund Contract accompanied by a letter notifying him/her of the actual cost of the extension



# Colorado Springs Utilities

*It's how we're all connected*

## *Application for Gas Service Line Approval*

This form to be used when requesting new gas service for any load over 1,000,000 BTU or any service where there is no stub to the property line. Please fill out all applicable information.

Location: Facility Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_

Applicant: Contact Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Plumbing Company: \_\_\_\_\_ Phone #: \_\_\_\_\_

Mailing Address (inc. zip): \_\_\_\_\_

License Number: \_\_\_\_\_ Fax #: \_\_\_\_\_

Facility: Building Square Footage: \_\_\_\_\_

Existing gas load: \_\_\_\_\_ BTUH or MCFH Proposed gas load \_\_\_\_\_ BTUH or MCFH

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Form can not be completed without signature.

**NOTE: Please include a site plan with this request.**

Send completed request to appropriate Field Engineering Office.

North Work Center  
7710 Durant Drive  
PO Box 1103, Mail Code 2150  
Colorado Springs, CO 80947-2150  
(719) 668-4985  
FAX (719) 668-4998

South Work Center  
1521 Hancock Expressway  
PO Box 1103, Mail Code 1821  
Colorado Springs, CO 80947-1821  
(719) 668-5564  
FAX (719) 668-5956

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For office use only

Work Order Number(s) \_\_\_\_\_

FE: \_\_\_\_\_ Phone# \_\_\_\_\_

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Form G-40

# QC Inspection Sheet

## QC Contact

**WONUM**  
**Description**  
**Address**  
**Contact**  
**Company**  
**Work Phone**  
**Cell Phone**  
**Work Type**  
**Sub Work Type**

Inspector	Date		FIELD NOTES
_____	__/__/__	Received From PA	_____
		<u>WATER / WASTE WATER</u>	_____
_____	__/__/__	Water Mains Installed	_____
_____	__/__/__	Sewer Mains Installed	_____
_____	__/__/__	Storm Sewer/ Drains Installed	_____
_____	__/__/__	Water Services Installed	_____
		<u>CURB AND GUTTER</u>	_____
_____	__/__/__	Curb and Gutter Installed	_____
_____	__/__/__	Curb Backfilled	_____
		<u>LOT LOCATIONS</u>	_____
_____	__/__/__	Front Lot Pins Installed	_____
_____	__/__/__	Lot Lines Marked On Curb	_____
_____	__/__/__	Flag Lot Pins Installed	_____
_____	__/__/__	Rear Lot Pins Installed	_____
		<u>CURB WAIVER INFO</u>	_____
_____	__/__/__	Curb Waiver	_____
_____	__/__/__	Grade Stakes @ 50 ft.	_____
_____	__/__/__	Grade Within 6" Trench Line	_____
_____	__/__/__	Grade Within 2" Equip Loc	_____
		Joint Trench <input type="checkbox"/> YES <input type="checkbox"/> NO	_____

**RELEASED TO:** \_\_\_\_\_ **Date** \_\_/\_\_/\_\_

North District Fax # 668-4998  
 South District Fax # 668-5606  
 Electric Service # 668-5535

I \_\_\_\_\_ UNDERSTAND ALL OBLIGATIONS I HAVE COMMITTED TO, WILL BE MET BEFORE ARRIVAL OF CSU CONSTRUCTION CREW. FAILURE, WILL RESULT IN THIS PROJECT GOING BACK ON THE 3 WEEK SCHEDULE.

# Colorado Springs Utilities

## Utility Staking Standards (New Residential and Commercial) Before Starting Job

**When Colorado Springs Utilities' facilities (Electric, Gas, Both – Joint Trench) are to be installed prior to the installation of curb and gutter, in private streets or right-of-way, that are designated as existing public utilities easements, the Developer or Developer's Representative shall adhere to the following staking requirements:**

- All wet utilities shall be installed prior to gas and electric installation – this includes storm water.
- Grade at Transformers, J-Boxes and Vaults to within +/- 3" of sub/final grade. On Streets, Easements and Right-Of-Ways to within +/- 6" of sub/final grade.
- Grade staking shall be provided at 25-foot spacing and located in the Right-Of-Way with offsets.
- Re-staking and/or additional staking, as needed, shall be provided within 48 hours of notice.
- Final grade staking shall have Station Numbers and Cut Sheets provided to a Colorado Springs Utilities Representative.
- Grade staking in Cul-De-Sac or Short Radius Turns, shall include Radius Points, Points of Curvature, Tangent Points, and be provided at a maximum of 15-foot spacing.
- Grade staking for Vaults, Transformer Pads, J-Boxes and Streetlights, shall have a minimum of two grade stakes, with no more than 5-foot offsets.
- Stakes shall be denoted in the format as follows: Station Number, Top Back Curb, Offset, Cut or Fill.
- The entire project shall have final staking before construction will commence, or as may otherwise be agreed upon with a Colorado Springs Utilities Quality Control Inspector or appropriate Colorado Springs Representative.
- Once construction has commenced, the Developer or Developer's Representative shall work with the Colorado Springs Utilities Representative "on-site", to provide adequate and appropriate staking, to eliminate any delays. Developer shall be responsible for delay costs due to inadequate staking.
- Verification survey shots shall be taken for Vaults, Transformer Pads and J-Boxes prior to the Construction Crew leaving the project, and Colorado Springs Utilities verification form shall be signed by the Developer or Developer's Representative, indicating Colorado Springs Utilities' release from the installed facilities.
- The Developer will incur all costs for improper installation or repositioning of facilities, due to staking errors or changes in grade. Once this verification form has been signed, the Developer will be responsible for corrections to utility facilities.
- The Developer understands that the staking provided may be destroyed upon installation of utilities.

WO#: \_\_\_\_\_  
Job Address: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Developer /  
Representative: \_\_\_\_\_

Colorado Springs Utilities Representative: \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

# Colorado Springs Utilities

## Utility Staking Standards (Verification Form)

Date: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
WO#: \_\_\_\_\_  
Job Address/Project Name: \_\_\_\_\_  
Developer: \_\_\_\_\_  
Springs Utilities Representative \_\_\_\_\_

I, \_\_\_\_\_, as developer or developer's representative **to hereby verify**  
(print name)  
that the installation of the utilities on \_\_\_\_\_ are now completed  
(project name)  
as of the \_\_\_\_\_ day of \_\_\_\_\_, year \_\_\_\_\_ and are positioned per the staking that  
(Date) (month) (year)  
I have provided.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_

**Comments:**

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Orig.: PA/QC Copy: Dev.



Added existing contract to LESS

Work Order #

**Economically Feasible (and <\$100,000)**

**EXTENSION CONTRACT**

**THIS AGREEMENT** (the “Contract”), made on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the Colorado Springs Utilities, an enterprise of the City of Colorado Springs, a home rule city and Colorado municipal corporation (“Colorado Springs Utilities”), and \_\_\_\_\_, a \_\_\_\_\_, (the “Applicant”).

**RECITALS:**

**A.** Applicant requests that natural gas facilities, which Colorado Springs Utilities will own, be constructed by Colorado Springs Utilities in order to supply gas service to \_\_\_\_\_; and

**B.** Colorado Springs Utilities is willing to construct requested facilities in accord with its lawful tariffs, rules, regulations and rates to maintain the safety and integrity of the existing system; and

**C.** In accord with Colorado Springs Utilities’ Natural Gas Tariffs, extension costs include labor, materials equipment charges, overheads, permits and other out-of-pocket expenses for engineering, installing and connecting facilities to the distribution system. Applicant has submitted the following required Non-Refundable Fees:

1. Design Fee of \$\_\_\_\_\_ (non-refundable); and
2. Commercial Inspection & Tie-in Fee \$ \_\_\_\_\_ (non-refundable); and
3. Total Cost of Extension \$ \_\_\_\_\_ multiplied by Sixteen percent (16%) for a total Contribution-in Aid payment of \$ \_\_\_\_\_; and
4. Design Fee + Commercial Inspection & Tie-in Fee + Contribution-in-Aid payment = Total Non-Refundable Fee payment of \$\_\_\_\_\_; and

The Total Non-Refundable Fee is required prior to the start of construction, which Utilities has determined to be economically feasible. The Total Non-Refundable Fee payment does not include any Applicant Requested Extras. Applicant has conveyed all necessary rights-of-way for constructed facilities to the appropriate entity in a form acceptable to Colorado Springs Utilities; and

**D.** Colorado Springs Utilities and Applicant desire that their agreement, relative to this natural gas facility extension, be in writing.

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**NOW, THEREFORE**, in consideration of the mutual promises and covenants of the parties, **IT IS AGREED**:

**CONDITIONS:**

1. Based upon preliminary field survey, design and estimate, the Total Non-Refundable Fee for these natural gas facilities shall be paid to Colorado Springs Utilities by the Applicant.

2. Failure of the Applicant to advance the amount specified shall in no way obligate Colorado Springs Utilities to construct the requested facilities at its own expense.

3. Colorado Springs Utilities may refuse to make connections to the system constructed pursuant to this Contract until all amounts due Colorado Springs Utilities have been paid.

4. Applicant shall be solely responsible for all costs associated with unstable soil conditions in new streets or easements constructed by the Applicant, or other unexpected costs. Such costs shall include, but not be limited to, damages to gas facilities and associated gas line trenches caused by poor soil composition, inadequate drainage (from either surface or subsurface water), extreme weather conditions or extended exposure of gas line trenches to environmental elements and vehicle loading. Applicant further agrees to notify Colorado Springs Utilities of any unstable soil conditions affecting gas trenches or facilities, and to perform mitigation efforts, at its sole expense, to repair unstable gas line trenches to Colorado Springs Utilities' specifications and in the presence of a Colorado Springs Utilities Construction Inspector.

5. In the event the Applicant wishes to have Colorado Springs Utilities or its Contractor perform the required work resulting from conditions described in Paragraph No. 6 below, Colorado Springs Utilities shall require the applicant to execute a Time and Materials Contract. All costs shall be paid to Colorado Springs Utilities according to the terms of the Time and Materials Contract, and shall not be eligible for refund under any Refund Contract with Colorado Springs Utilities.

6. Under extenuating circumstances such that Colorado Springs Utilities approves the installation of gas facilities prior to the installation of curb and gutter, or in streets or easements where curb and gutter will not exist, Applicant shall assure that such streets or easements are constructed to within six inches (6") of sub-grade and in a reasonable condition prior to the installation of gas facilities. Applicant shall provide staking in the form of curb and gutter staking, property line grade staking or off-set grade staking. Staking shall include cut and fill dimensions and Applicant shall provide cut and fill sheets as requested. Applicant shall be solely responsible for all costs associated with staking. Applicant shall be liable for the cost of any relocation or adjustment of gas facilities necessitated by a change in alignment or grade from that staked.

7. Applicant shall be responsible, at its sole expense, for locating any private underground facilities including empty conduits and sprinkler systems. Applicant shall

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be solely responsible for all costs associated with damages to private facilities that are not located at the time of construction.

8. Any taps requested by the Applicant or others, to these facilities, shall be subject to the approval of Colorado Springs Utilities and to the availability of natural gas at the time of the request.

9. This Contract may be assigned by the Applicant provided that the assignment is in writing, that the execution of the assignment by Applicant or Applicant's duly appointed representative is properly notarized and that the written approval of Colorado Springs Utilities is obtained prior to the assignment becoming effective. For purposes of approving any such assignment, Colorado Springs Utilities may rely on the notarized signatures without further investigation. If an assignment meets the requirements of this paragraph and is approved by Colorado Springs Utilities, the terms, covenants, conditions, provisions, and agreements of this Contract shall then become binding upon the Applicant and the assignee(s) as provided in the assignment. The Applicant and assignee(s) also agree to indemnify, defend, save and hold harmless Colorado Springs Utilities from any expense, claim or loss incurred by Colorado Springs Utilities as a result of performing its obligations under this Contract, including payment of refunds. So long as any payments due under this Contract are made in accord with the Contract or any assignment approved by Colorado Springs Utilities, Colorado Springs Utilities shall have no liability to Applicant, any assignee(s) or third parties on account of such payments.

10. The Applicant shall notify Colorado Springs Utilities in writing of any change of address, and waives any cause of action resulting from failure to notify Colorado Springs Utilities of any change of address.



By \_\_\_\_\_ (Applicant)

By \_\_\_\_\_

Title **Field Engineering Supervisor**

**System Extensions**

**Planning and Engineering**

\_\_\_\_\_ (print name)

Date \_\_\_\_\_ (date signed)

This contract is in accord with the contract form approved by the City Attorney's Office – Utilities Division.

Title \_\_\_\_\_

Date \_\_\_\_\_ (date Applicant signed)

Address \_\_\_\_\_

\_\_\_\_\_

Phone \_\_\_\_\_



Added existing contract to LESS

Work Order #

**EXTENSION CONTRACT**

**THIS AGREEMENT (the "Contract")**, made on the \_\_\_\_ day of \_\_\_\_\_, **20**\_\_\_\_, by and between the Colorado Springs Utilities, an enterprise of the City of Colorado Springs, a home rule city and Colorado municipal corporation ("Colorado Springs Utilities"), and \_\_\_\_\_, a \_\_\_\_\_ (the "Applicant").

**RECITALS:**

**A.** Applicant requests that natural gas facilities, which Colorado Springs Utilities will own, be constructed by Colorado Springs Utilities in order to supply gas service to \_\_\_\_\_; and

**B.** Colorado Springs Utilities is willing to construct requested facilities in accord with its lawful tariffs, rules, regulations and rates; and

**C.** In accord with Colorado Springs Utilities' Natural Gas Tariffs, Applicant has submitted the following required fees:

1. Design Fee of \$\_\_\_\_\_ (non-refundable); and
2. Commercial Inspection & Tie-in Fee \$\_\_\_\_\_ (non-refundable); and
3. Construction Cost of Extension (refundable) \$\_\_\_\_\_ ; and
4. Design Fee + Commercial Inspection & Tie-in Fee + Construction Cost =Total Fee payment of \$\_\_\_\_\_; and

Applicant has advanced the Total Fee payment and has conveyed all necessary rights-of-way for constructed facilities to the appropriate entity in a form acceptable to Colorado Springs Utilities; The Total Fee payment does not include any Applicant Requested Extras; and

**D.** Colorado Springs Utilities and Applicant desire that their agreement, relative to this natural gas facility extension, be in writing.

**NOW, THEREFORE**, in consideration of the mutual promises and covenants of the parties, **IT IS AGREED:**

**CONDITIONS:**

1. Based upon preliminary field survey, design and estimate, the Total (a portion is refundable – only the design fee is non-refundable) Fee for these natural gas facilities shall be paid to Colorado Springs Utilities by the Applicant.

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2. Failure of the Applicant to advance the amount specified shall in no way obligate Colorado Springs Utilities to construct the requested facilities at its own expense.

3. If the actual costs of construction exceed the sum of amount advanced by the Applicant, the Applicant shall pay the balance to Colorado Springs Utilities no later than 60 days after notification. After all amounts due to Colorado Springs Utilities have been paid, the Applicant will be entitled to execute a Refund Contract as provided for in the Natural Gas Tariffs, as may be subsequently modified, as set forth by the City Council and on file in the City's Clerk's Office.

4. If the actual costs of construction are less than the sum of money advanced by the Applicant, Colorado Springs Utilities shall refund, without interest to the Applicant, the difference between the estimated and actual costs of construction.

5. Colorado Springs Utilities may refuse to make connections to the system constructed pursuant to this Contract until all amounts due Colorado Springs Utilities have been paid.

6. Applicant shall be solely responsible for all costs associated with unstable soil conditions in new streets or easements constructed by the Applicant, or other unexpected costs. Such costs shall include, but not be limited to, damages to gas facilities and associated gas line trenches caused by poor soil composition, inadequate drainage (from either surface or subsurface water), extreme weather conditions or extended exposure of gas line trenches to environmental elements and vehicle loading. Applicant further agrees to notify Colorado Springs Utilities of any unstable soil conditions affecting gas trenches or facilities, and to perform mitigation efforts, at its sole expense, to repair unstable gas line trenches to Colorado Springs Utilities' specifications and in the presence of a Colorado Springs Utilities Gas Pipeline Inspector.

7. In the event the Applicant wishes to have Colorado Springs Utilities or its Contractor perform the required work resulting from conditions described in Paragraph No. 6 herein, Colorado Springs Utilities shall require the applicant to execute a Time and Materials Contract. All costs shall be paid to Colorado Springs Utilities according to the terms of the Time and Materials Contract, and shall not be eligible for refund under any Refund Contract with Colorado Springs Utilities.

8. Under extenuating circumstances such that Colorado Springs Utilities approves the installation of gas facilities prior to the installation of curb and gutter, or in streets or easements where curb and gutter will not exist, Applicant shall assure that such streets or easements are constructed to within six inches (6") of sub-grade and in a reasonable condition prior to the installation of gas facilities. Applicant shall provide staking in the form of curb and gutter staking, property line grade staking or off-set grade staking. Staking shall include cut and fill dimensions and Applicant shall provide cut and fill sheets as requested. Applicant shall be solely responsible for all costs associated with staking. Applicant shall be liable for the cost of any relocation or adjustment of gas facilities necessitated by a change in alignment or grade from that staked.

9. Applicant shall be responsible, at its sole expense, for locating any private underground facilities including empty conduits and sprinkler systems. Applicant shall

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be solely responsible for all costs associated with damages to private facilities that are not located at the time of construction.

10. Any taps requested by the Applicant or others, to these facilities, shall be subject to the approval of Colorado Springs Utilities and to the availability of natural gas at the time of the request.

11. This Contract may be assigned by the Applicant provided that the assignment is in writing, that the execution of the assignment by Applicant or Applicant's duly appointed representative is properly notarized and that the written approval of Colorado Springs Utilities is obtained prior to the assignment becoming effective. For purposes of approving any such assignment, Colorado Springs Utilities may rely on the notarized signatures without further investigation. If an assignment meets the requirements of this paragraph and is approved by Colorado Springs Utilities, the terms, covenants, conditions, provisions, and agreements of this Contract shall then become binding upon the Applicant and the assignee(s) as provided in the assignment. No refunds shall be paid to any assignee(s) of the Contract until the assignment is approved by Colorado Springs Utilities, and the Applicant and any assignee(s) waive any right of action resulting from the failure of the Applicant and/or assignee(s) to comply with the requirements set forth in this paragraph. The Applicant and assignee(s) also agree to indemnify, defend, save and hold harmless Colorado Springs Utilities from any expense, claim or loss incurred by Colorado Springs Utilities as a result of performing its obligations under this Contract, including payment of refunds. So long as any payments due under this Contract are made in accord with this Contract or any assignment approved by Colorado Springs Utilities, Colorado Springs Utilities shall have no liability to Applicant, any assignee(s) or any third parties on account of such payments.

12. This Contract is subject to rights of setoff; Colorado Springs Utilities may set off, against any refund owed to Applicant, any amounts that Applicant owes to Colorado Springs Utilities. In the event Colorado Springs Utilities exercises its right of setoff, it shall provide an accounting to Applicant to the extent of the amount set off in lieu of the refund payment of such amount.

13. The Applicant shall notify Colorado Springs Utilities in writing of any change of address, and waives any cause of action resulting from failure to notify Colorado Springs Utilities of any change of address. The Applicant hereby agrees to indemnify, defend, save and hold harmless Colorado Springs Utilities against any expense or loss incurred by Colorado Springs Utilities attempting to deliver refunds due to the failure of the Applicant to provide the said notification, or as a result of Colorado Springs Utilities effort to enforce and comply with this Contract, or as a result of a claim by a third party for damages or for the right to a refund under this Contract.

14. This Contract shall terminate upon execution of a Refund Contract between Colorado Springs Utilities and the Applicant.



Colorado Springs Utilities  
*It's how we're all connected*

By \_\_\_\_\_  
Title **Field Engineering Supervisor**  
**System Extensions**  
**Planning and Engineering**

Date \_\_\_\_\_ (date signed)  
This contract is in accord with the contract form  
approved by the Utilities General Counsel Division  
on **00/00/04**

\_\_\_\_\_  
(Applicant)

**By**  
By \_\_\_\_\_

\_\_\_\_\_  
(print name)

Title \_\_\_\_\_

Date \_\_\_\_\_  
(date Applicant signed)

Address \_\_\_\_\_

\_\_\_\_\_

Phone \_\_\_\_\_

Sample



**COLORADO SPRINGS UTILITIES  
CUSTOMER CONTRACT ADMINISTRATION**  
2880 International Cir, Suite 210 • Colorado Springs, CO 80910  
Phone (719) 668-8111 Fax (719) 668-8130  
**SINGLE PARCEL REFUND CONTRACT**

Added existing contract to LESS

THIS AGREEMENT (the “Contract”), which becomes effective on the \_\_\_\_\_ day of \_\_\_\_\_, the date the gas facilities covered by this Contract were charged with natural gas, by and between the Colorado Springs Utilities, (CSU), an enterprise of the City of Colorado Springs, a home-rule city and Colorado municipal corporation, with its principal place of business at 121 S Tejon Street, Colorado Springs, Colorado 80903, (hereinafter referred to as Colorado Springs Utilities), and \_\_\_\_\_, a (Corporation, Natural Person, Special District, Govt Entity, etc.), hereinafter referred to as Applicant, for (Project Name), WO# \_\_\_\_\_.

RECITALS

A. Applicant has requested that natural gas facilities be constructed by Colorado Springs Utilities in order to supply gas service as shown on the attached map(s); and

B. Colorado Springs Utilities has constructed requested gas facilities in accordance with its lawful tariffs, rules, regulations and rates (collectively, the Tariffs) under the Extension Contract dated \_\_\_\_\_, which shall be superseded by this Contract; and

C. Applicant has advanced the sum of \$(As-Built Cost) to Colorado Springs Utilities (the “Deposit”) to reimburse Colorado Springs Utilities for the Applicant’s portion of the actual construction costs, and has conveyed all necessary rights-of-way for constructed facilities to the appropriate entity in a form acceptable to Colorado Springs Utilities; and

D. Colorado Springs Utilities and Applicant desire that their agreement concerning this gas facility extension be in writing.

NOW, THEREFORE, in consideration of the premises and mutual promises of the parties as hereinafter set forth, IT IS AGREED:

CONDITIONS

1. For a period of ten years from the date of this Contract, Colorado Springs Utilities shall make a refund to the Applicant for each new gas connection made to the gas facilities described in this Contract. Refunds shall be calculated as specified in the Tariffs in effect at the time of connection, as set forth by the City Council and on file in the Office of the City Clerk/Treasurer. Refunds shall be paid to the Applicant on a periodic basis, without interest.

2. Any connections requested by the Applicant or others, to these facilities, shall be subject to the approval of Colorado Springs Utilities and to the availability of gas at the time of request.

3. Applicant acknowledges that, depending upon the number and size of the connections, the amounts refunded may be less than the Applicant's Deposit with Colorado Springs Utilities. Applicant further understands that in no event will the total amounts refunded under this Contract exceed the Deposit, nor will any refunds be made after expiration of this Contract’s term. Any unrefunded portion of the Deposit which exists at Contract expiration will become a contribution-in-aid of construction to Colorado Springs Utilities, as provided in the Tariffs.



4. Applicant understands that additional gas service connections will be provided only if gas is available when requested and in conformance with Colorado Springs Utilities Tariffs in effect at the time such additional gas service connections are requested by the Applicant or others desiring to obtain service from this extension.

5. Under the terms of this Contract, additional gas service connections installed after the completion of an extension may be eligible for refunds. Refunds for such service connections shall be provided in accordance with the provisions specified in the Tariffs, and such refunds shall be reduced by the actual cost of installing the additional new service stubs required to make the connection.

6. This Contract may be amended for the purpose of accommodating changes as a result of subdivision re-plats requiring the removal or abandonment of service stubs or the abandonment of gas mains. In the event that such changes to the gas system are requested by the Applicant, Colorado Springs Utilities and Applicant may execute an amendment to this Contract as a condition of approval of the gas system change. The amendment will reduce the remaining Deposit by the actual value of the abandoned or removed facilities which were originally installed under this Contract. Colorado Springs Utilities shall be compensated for such changes according to its Time and Materials Work Request procedures in effect at the time of the request. A contract amendment may not be used to alter the duration of the Contract unless permitted under the Tariffs.

7. This Contract may be assigned by the Applicant provided that the assignment is in writing, that the execution of the assignment by Applicant or Applicant's duly appointed representative is properly notarized, and that the written approval of Colorado Springs Utilities is obtained prior to the assignment becoming effective. For purposes of approving any such assignment, Colorado Springs Utilities may rely on the notarized signatures without further investigation. If an assignment meets the requirements of this paragraph and is approved by Colorado Springs Utilities, the terms, covenants, conditions, provisions, and agreements of this Contract shall thereafter become binding upon the Applicant and the assignee(s) as provided in the assignment. No refunds shall be paid to any assignee(s) of the Contract until the assignment is approved by Colorado Springs Utilities, and the Applicant and any assignee(s) waive any right of action resulting from the failure of the Applicant and/or assignee(s) to comply with the requirements set forth in this paragraph. The Applicant and assignee(s) also agree to indemnify, defend, save and hold harmless Colorado Springs Utilities from any expense, claim or loss incurred by Colorado Springs Utilities as a result of performing its obligations under this Contract, including payment of refunds. So long as any payments due under this Contract are made in accordance with this Contract or any assignment approved by Colorado Springs Utilities, Colorado Springs Utilities shall have no liability to Applicant, any assignee(s) or any third parties on account of such payments.

8. This Contract is subject to rights of setoff; Colorado Springs Utilities may set off, against any refund owed to Applicant, any amounts that Applicant owes to Colorado Springs Utilities. In the event Colorado Springs Utilities exercises its right of setoff, it shall provide an accounting to Applicant to the extent of the amount set off in lieu of the refund payment of such amount.

9. The Applicant shall notify Colorado Springs Utilities in writing of any change of address, and waives any right of action resulting from failure to notify Colorado Springs Utilities of any change of address. The Applicant hereby agrees to indemnify, defend, save and hold harmless Colorado Springs Utilities against any expense or loss incurred by Colorado Springs Utilities attempting to deliver refunds due to the failure of the Applicant to provide the said notification, or as a result of Colorado Springs Utilities effort to enforce and comply with this Contract, or as a result of a claim by a third party for damages or a refund under this Contract.

**COLORADO SPRINGS UTILITIES**

**CUSTOMER**

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Authorized Signature

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Printed Name

Printed Name

Supervisor, Customer Contract Administration

Title

Title

Date

Date

Approved as to form by the City Attorney's Office-Utilities Division:

Sample



**COLORADO SPRINGS UTILITIES  
CUSTOMER CONTRACT ADMINISTRATION**  
2880 International Cir, Suite 210 • Colorado Springs, CO 80910  
Phone (719) 668-8111 Fax (719) 668-8130  
**MAINLINE FACILITIES REFUND**

Added existing contract to LESS

THIS AGREEMENT (the "Contract"), which becomes effective on the \_\_\_\_\_ day of \_\_\_\_\_, the date the gas facilities covered by this Contract were charged with natural gas, by and between the Colorado Springs Utilities, (CSU), an enterprise of the City of Colorado Springs, a home-rule city and Colorado municipal corporation, with its principal place of business at 121 S Tejon Street, Colorado Springs, Colorado 80903, (hereinafter referred to as Colorado Springs Utilities), and \_\_\_\_\_, a (Corporation, Natural Person, Special District, Govt Entity, etc.), hereinafter referred to as Applicant, for (Project Name), WO# \_\_\_\_\_.

RECITALS

A. Applicant has requested that natural gas mainline facilities be constructed by Colorado Springs Utilities in order to supply gas service as shown on the attached map(s); and

B. Colorado Springs Utilities has constructed requested gas facilities in accordance with its lawful tariffs, rules, regulations and rates (collectively, the "Tariffs") under the Extension Contract dated \_\_\_\_\_. Said Extension Contract shall be superseded by this Contract; and

C. Applicant has advanced the sum of \$(As-Built Cost) to Colorado Springs Utilities (the "Deposit") to reimburse Colorado Springs Utilities for the Applicant's portion of the actual construction costs, and has conveyed all necessary rights-of-way for constructed facilities to the appropriate entity in a form acceptable to Colorado Springs Utilities; and

D. Colorado Springs Utilities and Applicant desire that their agreement relative to this gas facility extension be in writing.

NOW, THEREFORE, in consideration of the premises and mutual promises of the parties as hereinafter set forth, IT IS AGREED:

CONDITIONS

1. For a period of twenty years from the date of this Contract, Colorado Springs Utilities shall make refunds to the Applicant based upon the ratio of actual connected load to expected load. The expected load to be served by the facilities described in this Contract is \_\_\_\_\_ MCFH. Refunds shall be calculated as specified in the Tariffs in effect at the time of connection, as set forth by the City Council and on file in the City's Clerk/Treasurer. Refunds shall be paid to the Applicant on an annual basis, without interest.

2. Any connections to this main extension requested by the Applicant or others shall be subject to the approval of Colorado Springs Utilities and to the availability of gas at the time of request.

3. Applicant acknowledges that, depending upon the build-out rate and the load connections to the system, the amounts refunded may be less than the Applicant's Deposit with Colorado Springs Utilities. Applicant further understands that in no event will the total amounts refunded under this Contract exceed the Deposit, nor will any refunds be made after expiration of this Contract's term. Any unrefunded portion of the Deposit which exists at Contract expiration will become a contribution-in-aid of construction to Colorado Springs Utilities, as provided in the Tariffs.

4. Applicant understands that additional gas service connections will be provided only if gas is available when requested and in conformance with Colorado Springs Utilities Tariffs at the time such additional gas is requested by the Applicant or others desiring to obtain service from these extensions.

5. This Contract may be amended for the purpose of accommodating changes as a result of subdivision re-plats requiring the removal or abandonment of service stubs or the abandonment of gas mains. In the event that such changes to the gas system are requested by the Applicant, Colorado Springs Utilities and Applicant may execute an amendment to this Contract as a condition of approval of the gas system change. The amendment will reduce the remaining Deposit by the actual value of the abandoned or removed facilities which were originally installed under this Contract. Colorado Springs Utilities shall be compensated for such changes according to its Time and Materials Work Request procedures in effect at the time of the request. A contract amendment may not be used to alter the duration of the Contract unless permitted under Tariffs.

6. This Contract may be assigned by the Applicant provided that the assignment is in writing, that the execution of the assignment by Applicant or Applicant's duly appointed representative is properly notarized, and that the written approval of Colorado Springs Utilities is obtained prior to the assignment becoming effective. For purposes of approving any such assignment, Colorado Springs Utilities may rely on the notarized signatures without further investigation. If an assignment meets the requirements of this paragraph and is approved by Colorado Springs Utilities, the terms, covenants, conditions, provisions, and agreements of this Contract shall thereafter become binding upon the Applicant and the assignee(s) as provided in the assignment. No refunds shall be paid to any assignee(s) of the Contract until the assignment is approved by Colorado Springs Utilities, and the Applicant and any assignee(s) waive any right of action resulting from the failure of the Applicant and/or assignee(s) to comply with the requirements set forth in this paragraph. The Applicant and assignee(s) also agree to indemnify, defend, save and hold harmless Colorado Springs Utilities from any expense, claim or loss incurred by Colorado Springs Utilities as a result of performing its obligations under this Contract, including payment of refunds. So long as any payments due under this Contract are made in accordance with this Contract or any assignment approved by Colorado Springs Utilities, Colorado Springs Utilities shall have no liability to Applicant, any assignee(s) or any third parties on account of such payments.

7. This Contract is subject to rights of setoff; Colorado Springs Utilities may set off, against any refund owed to Applicant, any amounts that Applicant owes to Colorado Springs Utilities. In the event Colorado Springs Utilities exercises its right of setoff, it shall provide an accounting to Applicant to the extent of the amount set off in lieu of the refund payment of such amount.

8. The Applicant shall notify Colorado Springs Utilities in writing of any change of address, and waives any right of action resulting from failure to notify Colorado Springs Utilities of any change of address. The Applicant hereby agrees to indemnify, defend, save and hold harmless Colorado Springs Utilities against any expense or loss incurred by Colorado Springs Utilities attempting to deliver refunds due to the failure of the Applicant to provide the said notification, or as a result of Colorado Springs Utilities effort to enforce and comply with this Contract, or as a result of a claim by a third party for damages or a refund under this Contract.

**COLORADO SPRINGS UTILITIES**

**CUSTOMER**

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Manager, System Extensions

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

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Date

Date

Approved as to form by the City Attorney's Office-Utilities Division:

Sample

“A” license. If insurance is lapsed, cancelled or reduced, the Contractor or Utility Service Installer will no longer be permitted to install natural gas service lines, and the lapse, cancellation or reduction of insurance shall automatically suspend the Utility Service Installer license until the required coverage is reinstated.

## 2) Utility Service Installer License Process:

- a) A Utility Service Installer license can be obtained by:
  - 1) Paying all applicable training and license fees;
  - 2) Attending a Knowledge, Skill and Licensing assessment;
  - 3) Passing a written examination; and
  - 4) Successfully completing a practical hands-on socket heat fusion evaluation.
- b) There will only be ~~three~~four Utility Service Installer Knowledge, Skill and Licensing assessments scheduled and held during each calendar year. It shall be the responsibility of the Licensed Utility Service Installer (LUSI) to monitor their license expiration date and to make sure that they sign up and attend one of these scheduled assessments prior to the expiration date printed on their license. The four assessments shall be scheduled in the months of January, April, July and October. If the attendance exceeds what can be accommodated for and/or managed, an additional class shall be scheduled in the same week for that month. To sign up for one of these scheduled assessments, contact Service Installation Support at 719-668-7646.

The written examination is conducted in two parts: the first covering aspects of Chapter 4, Service Line Design and Construction and the second covering aspects of the heat fusion process. The minimum passing score on each part of the written examination is 80 percent. An applicant who fails to achieve a passing score on either part of the written examination will be required to retake the class.

- c) When a passing score has been achieved on the written examination, the applicant may proceed to the practical portion of the evaluation. During the practical evaluation, applicants will be required to demonstrate the ability to make socket heat fusions on all polyethylene pipe sizes for which they desire to be licensed.
- d) Applicants who have successfully completed the written examination and are scheduled to take the practical hands-on fusion evaluation must provide all of their own pipe and fittings for the sizes they wish to be evaluated on and licensed for. Each person or company must bring their own socket heat fusion equipment and tools to the hands-on fusion evaluation, for inspection by Colorado Springs Utilities personnel, to make sure the equipment and tools are in good working condition. All socket heat fusion tools brought into the practical evaluation must be in good working order or the testing will be cancelled.
- e) Once licensed, the Utility Service Installer shall keep the licensee’s employment information current with Colorado Springs Utilities Energy Construction Operations and Maintenance Department (719-668-7646).

- d) The LUSI is responsible for all applicable Return Trip Inspection and Connections Fees as specified in Utilities' Tariff.
- e) The LUSI is responsible for all applicable Cancellation Fees as specified in Utilities' Tariff.
- f) Fees due from a Utility Service Installer licensee will be billed on a monthly basis. The Utility Service Installer's license will be automatically suspended when any bill for fees due remains unpaid after 30 days from the date of the bill's due date. Nonpayment of fees is grounds for revoking a Utility Service Installer license.
- g) When required, ~~2-inch and other~~ welded natural gas service risers shall be fabricated by the Colorado Springs Utilities Energy Construction Operations and Maintenance Department Machine Weld Shop for installation by a LUSI. All ~~2-inch and larger~~ welded natural gas service risers must be approved by Colorado Springs Utilities Field Engineering prior to fabrication. A 100 dollar fee will be charged to fabricate each custom riser.

#### **5) Records Management:**

The Colorado Springs Utilities Energy Construction Operations and Maintenance Department will maintain records of test scores; records of last inspected fusions; records of Insurance Certification; records of violations, suspensions and revocations, and records of license dates and license terms for all LUSIs.

**c) Gas Service Line to an Existing Structure that has Natural Gas Service:**

Any structure that already has a natural gas service line and now requires the gas service line to be relocated, upgraded, replaced, to have additional risers installed, to have a branch service installed, or the gas meter to be moved for any reason, this work shall be performed by Colorado Springs Utilities Operator Qualified personnel.

(A branch gas service line is a gas service line which intersects, attaches, and is fed from an existing natural gas service line.)

**d) Gas Service Line to a New Building or Existing Buildings that have not had previous Natural Gas Service:**

Colorado Springs Utilities LUSIs shall be allowed to install all new natural gas service lines for all brand new structures or existing structures, which require natural gas service and are creating new gas load.

**e) Gas Service Lines Being Killed:**

All natural gas service lines within Colorado Springs Utilities gas service area that are being killed, for the demolition of a building, home or structure, shall always be killed and capped at the designated property line of the address and an electronic marker placed at this location.

All natural gas service lines that are servicing any buildings, homes or structures within Colorado Springs Utilities gas service area, that are being demolished and no building, home or structure shall be rebuilt in its place, the lot or property is to remain vacant or may become a parking lot, and no longer requires natural gas service, the gas service line shall be killed and capped at the main.

**f) Gas Service Line Excess Flow Valves:**

Excess Flow Valves (EFVs) shall be required for ALL new and replaced Single Family Residential service lines, regardless of size and regardless of Pressure District. The EFV shall be installed as close to the tapping tee/main as possible.

For replaced service lines, EFVs will only be installed when the tapping tee is exposed.

NOTE: Single Family Residential is defined as one residential house on one lot.

## **4.02 Pre-Installation Procedure**

**a) Summary:**

The following summary may be used as a guide when designing a gas service line installation.

- 1) Contact Colorado Springs Utilities ~~Infrastructure Records~~ (719-668-3524) to request gas service, determine pressure available, and gas service stub location for the subject premises prior to installation of the gas service line.
- 2) Contact Colorado Springs Utilities Field Engineering if any of the following situations occur:



- 2) Location of outside electrical appliances, transformer(s) and electric meter(s).
- 3) Location of all existing and proposed underground facilities including drainage.
- 4) Location of existing gas service stub(s) as applicable.
- 5) Location of proposed gas meter(s).
- 6) The individual gas load for each existing and proposed gas appliance(s).
- 7) Address and street name of the building(s) to be served.
- 8) Name and telephone number of Applicant.
- 9) Detail drawing of multiple meter steel manifolds, as applicable.

\*Any changes that have been made to the service design which has been approved, including, but not limited to the gas meter location, individual appliance load, total connected load, metering pressure, address or street number may delay the installation of the gas meter. We reserve the right to hold the installation of the gas meter and require you to resubmit the correct information to Field Engineering.

## 4.03 Installation Procedures

### a) Summary:

The following summary may be used as a guide to accomplish installation tasks for gas service lines:

- 1) The typical residential service line installation utilizes a joint trench for both electric and gas services. NOTE: Joint trenching of electric and gas service lines shall only occur when an address being served resides within both Colorado Springs Utilities electric and gas service territories where both utilities are owned by Colorado Springs Utilities. The LUSI is responsible for providing the trenching, padding & backfilling, electric wire and gas service lines (see Table 7 for Approved Materials, Table 11 for Inspection Checklist, and Figures 1-9 for installation details).
- 2) Contact Colorado Springs Utilities Machine Weld Shop *if a* steel multiple meter manifold *or* steel gas service riser(s) is required. All gas service risers larger than 2 inches ~~and larger~~ shall be welded steel risers. Colorado Springs Utilities Machine Weld Shop will fabricate all steel multiple meter manifolds and all steel gas service risers. **EXCEPTION:** Approved multi-meter above ground manifolds, ~~or if the riser site has been approved by Colorado Springs Utilities personnel as a field test site for 2" anodeless risers. The only approved manufacturers of these risers are RW Lyall and Elster Perfection.~~

**NOTE TO INSTALLERS:** If installing a ~~2-inch~~ welded steel riser, Colorado Springs Utilities Gas Construction Quality Control/ Inspections (719-668-3667) must be contacted a minimum of 5 working days prior to the scheduled appointment so arrangements can be made for a Colorado Springs Utilities welder to be on site for the scheduled appointment to weld the steel valve onto the riser.

Contact Colorado Springs Utilities Machine Weld Shop at least 10 working days prior to installation date of manifold or riser (719-668-5384).

- 3) Prior to inspection, gas service line(s) shall be leak-tested with air in accordance with 4.03(e) Leak Test Requirements. Also, each gas service line trench shall be properly padded per 4.03(c) Service Line Installation notes 9 and 10.
- 4) Contact Colorado Springs Utilities ~~Infrastructure Records~~ for an inspection (719-668-3524). See 4.04 Inspections, for inspection procedure. Questions and/or problems regarding gas service line inspections must be referred to Colorado Springs Utilities Energy Construction Operations and Maintenance Department (719-668-7646).
- 5) Upon approval through inspection, the Colorado Springs Utilities Energy Construction Operations and Maintenance Department will energize (tie-in) the gas service line(s).
- 6) Once the service line(s) is approved, the LUSI installing the gas service line(s) shall be responsible for back-filling the gas service line(s) trench to a minimum cover of 12 inches at time of tie-in before inspector leaves site. The final back-fill procedure should be completed within 24 hours from the time of tie-in to best protect services in the trench.
- 7) If the service riser and/or fuel gas piping inlet are not located such that a standard meter set can be constructed (see Figures 5 & 8), the configuration will be rejected. Contact Colorado Springs Utilities ~~Field Service Department~~ Field Services (719-668-~~7354~~7350) for questions and/or problems with the rejection.
  - a) If the configuration is rejected due to the fuel gas piping, the Builder will be responsible to resolve the issue.
  - b) If the configuration is rejected due to the service riser, Colorado Springs Utilities will be responsible, unless the service riser location provided by the Builder proves incorrect at time of meter set, the Builder will be responsible.

**b) Service Line Location:**

Any utility service lines (other than communication as shown in Figure 1B) owned by any entity other than Colorado Springs Utilities are not allowed to be installed in a joint trench with Colorado Springs Utilities owned natural gas service lines. See Figure 4B for non-Colorado Springs Utilities CSU owned electric utility lot layout requirements.

- 1) Each gas service line shall be located within the property lines of the lot that is intended to serve. Utilities will provide only one Natural Gas Service Stub to each individual lot that will extend to the property line where practical. Each separate and/or additional structure/building shall be served by a single or separate gas service line, riser and meter where practical. All gas service lines shall be installed in the most direct, straightest and practical path possible from the gas service stub location to the gas service riser and meter location. See 2.02c(3) for gas Location & Clearances of Gas Main service-Line minimum separations.

**2) Joint Trench:**

Gas service lines installed in a joint trench with Colorado Springs Utilities owned electric and/or communication lines require a 12 inch minimum radial separation (see Figures 1 & 9).

### 3) **Single Trench (Gas Only):**

Due to the imperfect science related to service line locates all gas service lines shall maintain the minimum required horizontal separation from other buried utilities, property lines and underground structures which run parallel to the gas service line when installed in a gas only trench. Where the required horizontal separation distance cannot be maintained, a reasonable separation distance between one and three feet will be considered at the discretion of the Colorado Springs Utilities CSU-ECOM Energy Construction Operations and Maintenance Department Gas Quality Control Supervisor and/or the Gas Construction Section Leader only. Any and all exceptions or variances that may be granted for the required gas standards by the Colorado Springs Utilities CSU-ECOM Energy Construction Operations and Maintenance Department Gas Quality Control Supervisor and/or the Gas Construction Section Leader, shall be formerly documented in detail and state the exact circumstances, terms and conditions for future reference.

A one foot vertical separation shall be required for all unavoidable utility crossings and when crossing under a retaining wall or its footing.

Where buried utilities and/or underground structures prohibit adherence to separation requirements, a polyethylene protective sleeve must be installed with prior approval from the Colorado Springs Utilities Energy Construction Operations and Maintenance Department. The protective sleeve shall have an inside diameter sufficient for insertion of the gas service line without causing undue resistance, and shall be of the same material as the gas service line. The protective sleeve shall extend a minimum of 3 feet beyond the perimeter of the conflicting structure.

#### **c) Service Line Clearances:**

Gas service lines should have the following minimum separations:

1) Minimum 3 foot horizontal separation from property lines, above or below ground structures, and/or other utilities.

**EXCEPTION:** Minimum 2'-6" (30 inch) horizontal separation from property lines, above or below ground structures, and/or other utilities, shall only be allowed where and when residential structures are built on less than a 6 foot setback from the side property line (distance of less than 6 feet between the side wall of the structure and the side property line). See Figure 4A.

2) Minimum one foot vertical separation when crossing other utilities.

3) Minimum 24 inch cover required.

**Note: separations are measured from the outside diameters of the utility lines.**

#### **e)d) Service Line Installation:**

- 7) For gas service line(s) no more than 2 socket fusion couplings between the gas service stub and the gas service riser shall be allowed. Colorado Springs Utilities [Gas Construction Quality Control](#) Inspectors must approve the use of more than 2 socket fusion couplings. All couplings must be exposed for inspection. The minimum pipe lengths between adjacent socket fusions, except for those associated with field bends, are detailed in Table 6.
- 8) No gas service line shall be installed in an “over dig” area of a building foundation prior to it being completely backfilled and appropriately compacted. After the entire “over dig” area of the foundation is backfilled and compacted, a separate trench shall be dug for the installation of the gas only service line or joint trench service lines.
- 9) All gas service lines shall be properly supported on well-compacted soil prior to back-filling.
- 10) Prior to back-filling, an approved padding material (bedding sand), equal to manufactured sand (see Table 7 for Approved Materials), shall be used to:
  - a) Line bottom (below pipe) of the Joint Trench and Gas Only service line trench with a minimum of six inches (6") of approved padding material.
  - b) Place over the pipe an additional 6 inches of approved padding material.
  - c) Backfill completely around both the Jbox and the temporary electric pedestal at the time when it is relocated from the property line and installed at the house or foundation.
- 11) The trench depth shall be adjusted such that the depth of the gas only service line is a minimum of 24 inches, 32 inches for joint trench with electric, and a maximum of 48 inches below existing grade and proposed final grade, including the required padding. The cover above the gas service line shall be provided over the entire length of the gas and electric service lines including the top layer of padding material as shown in Figure 1. See Table 13 for Minimum & Maximum Cover for Natural Gas Lines.
- 12) All gas only service line trenches shall be a minimum of 12 inches wide throughout the vertical depth. Joint trench service line trenches shall be a minimum of 24 inches wide throughout the vertical depth (see Figure 1).
- 13) Back-fill material shall be free of all foreign debris such as bricks, concrete, asphalt, wood, and trash that may damage the gas service line. Colorado Springs Utilities Energy Construction Operations and Maintenance Department reserves the right to excavate any and all service line trenches to ensure that post back-fill padding requirements have been met.
- 14) A bell-hole shall be provided by the LUSI at the property line or easement line in order to facilitate the tie-in of the gas service line.
  - a) For 3/4 inch and one inch gas service lines the bell hole shall be a minimum of 4 feet long by 4 feet wide.

thermite welded to the riser below grade. Tracer wire is not to be thermite welded to any steel riser.

- 23) The electric service wire in a joint trench installation with the gas service line shall not be installed until the Colorado Springs Utilities [Gas Construction](#) Quality Control Inspector arrives on site. The electric wire is provided by the LUSI. Additionally, in the event the electric service wire must be installed under a driveway, patio, deck or similar structure, a 2 inch (PVC SCH40) electrical rated (grey) conduit must be installed, extending 24 inches beyond both sides of the obstruction, with a utility-provided locator biscuit installed on each side of conduit for future locating purposes. See Table 7 for Approved Electrical Materials.
- 24) Refer to the [CSU Colorado Springs Utilities](#) Electric Line Extension & Service Standards book for additional details.

**d)e) Cold Weather Handling Procedures (Below 55°F):**

- 1) Remove all ice, frost, snow, and soil from external and internal surfaces to be fused.
- 2) Wipe fusion surfaces dry using paper towels or rags.
- 3) Use a wind break shield when necessary
- 4) Keep socket fittings inside vehicles until ready for fusion.
- 5) Use a back-up cold ring clamp behind the normally placed cold ring clamp and shim with tape to prevent slippage.
- 6) To ensure proper melt patterns, follow the heating times listed in Table 5 or increase heating times when conditions warrant. Do not increase iron temperature or pressure of pipe on heating tool faces to compensate for cold conditions.
- 7) Heating times may vary during cold weather; therefore trial fusion under field conditions will assist the LUSI in establishing acceptable times. Trial fusions should be made by increasing heating times by 5 second increments until the proper heating time is determined.
- 8) After establishing the proper cold weather heating time, begin fusion by placing the male heat fusion tool into the socket coupling. Second, place the female portion of the fusion tool over the exterior of the pipe to be fused. Once the female heat fusion tool is fully seated on the pipe to be fused, begin counting off the heating time. After the heating time has elapsed, quickly remove the pipe and fitting from the heating tool faces and join within 3 seconds.
- 9) See 4.04(c) for Inclement Weather and Show Up Time explanation.

**e)f) Leak Test Requirements:**

The pressure gauge used for the leak test shall be a test gauge with a range of zero to 300 pounds per square inch (psig).

- 1) The pressure to which the gas service line is subjected shall be 125 pounds per square inch, plus or minus 10 pounds per square inch.
- 2) If a gas service line is pressurized over 135 psig, installer will be required to replace entire line including the riser.
- 3) All gas service lines 2" diameter and smaller shall be leak tested for a minimum of 15 minutes for lengths less than or equal to 200', but not less than one hour for every 500 feet prior to tie-in. For pipe lengths greater than 200' air test for 15 minutes for every 200 feet in length (e.g., 201' to 400' test for 30 minutes; 401' to 600' test for 45 minutes, 601' to 800' test for 1 hour, etc.). When the gas service line is allowed to be installed with the prior approval of Colorado Springs Utilities Gas Construction Quality Control/ Inspections personnel prior to the gas service stub installation, the service line shall remain under leak test until a gas service stub is installed by Colorado Springs Utilities. When this occurs, the licensed Utility Service Line Installer shall be billed daily fees for Colorado Springs Utilities Gas Construction Quality Control/ Inspections personnel to check and affirm that leak test pressure is maintained, and that the gas service line has not been unknowingly damaged. NOTE: This is not the preferred process or method of installation.

**g) Venting Through Pavement:**

Except as specified in this paragraph, gas service line(s) shall not be located below or pass through any underground or surface structure.

- 1) Where a structure abuts a building, a gas service riser vent shall be installed. The gas service riser vent shall consist of a 12 inch by 12 inch opening in the sealed or concrete pavement surface. The top 6 inches of the gas service riser vent opening shall be fitted with dirt, loose gravel or rock, as outlined in Figure 2. Other gas service riser vents may be used only with prior approval from the Colorado Springs Utilities Energy Construction Operations and Maintenance Department.

**g)h) Mobile Home Lots:**

In addition to other requirements detailed in this manual, a gas service line serving a mobile home lot shall be designed and installed in accordance with Figure 3. No more than 10 mobile home lots in a single mobile home park will be scheduled for inspections during a single business day.

## **4.04 Inspections**

Colorado Springs Utilities Gas Construction Quality Control Inspectors will inspect gas service line installations. For requesting a Gas Service Line Inspection contact Colorado Springs Utilities Infrastructure Records Inspections between 7:30 a.m. and 2:00 p.m., Monday through Friday, excluding holidays (see scheduling gas inspections in Phone Section). Appointments need to be scheduled a minimum of 3 business days before the requested appointment date, and no more than 3 weeks before the scheduled appointment date (see Table 10 for Appointment & Cancellation Criteria).

a) Prior to inspection, please note the following:

- 1) Colorado Springs Utilities Gas Construction Quality Control Inspectors may require guard posts, padding, protective sleeve(s) and/or venting, at their discretion.
- 2) All service line trenches will need to remain open for inspection, including all prefab riser and line assemblies.
- 3) Gas service line(s) will not be inspected until gas mains and service stubs have been installed.

***EXCEPTION:*** Gas service line(s) associated with scattered service stub installation. Colorado Springs Utilities Field Engineering will determine the proper location of the service stub.

- 4) No gas service lines shall be installed prior to installation and energizing of gas mains and stubs.
- 5) Excavation of all gas service stubs shall be performed using careful probing with hand tools only.
- 6) Building/property address with street name must be visible.
- 7) Pipe and/or tracer wire must be of proper length.
- 8) Pressure gauge must be installed on the service line riser.
- 9) Padding must be 6 inches above and below the gas service line.
- 10) Yellow paint must mark the proposed gas service riser location at the building wall.
- 11) The gas service regulator must be greater than 3 feet from operable windows, vents, and sources of ignition (see Figure 9).
- 12) No more than 2 fusion couplings are permitted on a service line; one at the riser pigtail and one along the length of the service line. Colorado Springs Utilities Gas Construction Quality Control Inspectors must approve the use of more than 2 socket heat fusion couplings and shall only do so if the service line exceeds 500 feet in length or if there are extenuating circumstances as determined by the Colorado Springs Utilities Gas Construction Quality Control Inspector that require more fittings to be used.
- 13) The trench and bell hole must be cleaned out and leveled.
- 14) Field bends of the service line must meet the minimum bending radius requirements.
- 15) A required minimum one foot of gas service line must be exposed in the bell-hole, centered with at least 2 foot of clearance on each side of the service stub. Also, 6 inches of clearance is required below all polyethylene stubs and 12 inches of clearance below all steel stubs.

- 16) Utility crossings require a minimum of one foot vertical separation, and 3 feet horizontal separation for parallel facilities.
- 17) All utility locations must be dimensioned from property lines, building lines, or other permanent landmarks.
- 18) When gas, electric, and communication lines are approved to be in the same trench, a 12 inch radial separation must be maintained.

~~18)~~

**b) Special Conditions:**

Colorado Springs Utilities Energy Construction Operations and Maintenance Department reserves the right to grant partial inspections of gas service line(s) for flag lots. A gas service line may be extended up to the flag portion of the lot only if Applicant has obtained Colorado Springs Utilities Energy Construction Operations and Maintenance Department approval and water and sewer services have been installed.

Special conditions may warrant a partial inspection of gas service line(s) in order to allow for paving installation prior to final approval and tie-in of the completed gas service line(s). Colorado Springs Utilities Energy Construction Operations and Maintenance Department must pre-approve this type of installation.

Under certain circumstances where service lines cannot be installed prior to installation of retaining walls, driveways, etc., a protective sleeve may be required. This sleeve, and its intended use, must be approved by Colorado Springs Utilities prior to installation.

**c) Re-Inspection:**

If gas service line(s) fails to pass inspection, the [Colorado Springs Utilities Gas Construction Quality Control Inspector](#) will present an Inspection Checklist to the LUSI with the rejection issues listed. All deficiencies must be corrected/remedied before a re-inspection may be requested and scheduled (see Table 11 for Joint Trench Inspection Checklist). Contact Colorado Springs Utilities ~~Infrastructure Records Inspections~~ to schedule re-inspection (see [scheduling gas inspections in](#) Phone Section).

**d) Inclement Weather and Show Up Time:**

For each scheduled work day, Colorado Springs Utilities shall determine if weather conditions will permit a productive workday. However, it shall be the responsibility of the Utility Service Line Installer to contact the Colorado Springs Utilities representative no earlier than 30 minutes prior to the start of the workday to determine if weather conditions will allow work. If no contact is made and work is cancelled due to weather conditions, the Utility Service Line Installer shall not be entitled to any reimbursement from Colorado Springs Utilities.

Utility Service Line Installer shall not be entitled to any reimbursement from Colorado Springs Utilities. When Colorado Springs Utilities contacts the Utility Service Line Installer



prior to starting the scheduled work day, and Colorado Springs Utilities has determined that weather conditions will not allow for a productive work day, no reimbursement shall be due to the Utility Service Line Installer for any show up time.

If Colorado Springs Utilities determines weather conditions will not allow for a productive workday, than all appointments for that day and all other appointments for that work week will shift out one day or to the first day weather permits a productive workday. This could require appointments shifting to the Saturday or Sunday of that week. Colorado Springs Utilities will make every effort to bring on additional inspection/tie-in crews to complete the appointments as soon as possible. Colorado Springs Utilities will notify everyone whose appointments have been impacted by cancelled day(s) as soon as the revised appointment dates have been determined.

Some weather conditions which could result in cancellation of appointments include:

- 1) Sub-zero temperatures with the wind chill well below zero
- 2) It is snowing and windy
- 3) Significant accumulation of snow or rain
- 4) Driving conditions are adverse and/or treacherous
- 5) Any weather conditions that would put our employees or contractors safety at risk or jeopardize the integrity of the work being performed

Contact a [Colorado Springs Utilities Gas Construction](#) Quality Control Supervisor at 719-668-3667 or 719-491-8142 (cell) to determine if weather conditions will permit for inspection and tie-in of services. If unable to reach the QC Supervisor, contact the QC administrative representative at 719-668-7646.

## **4.05 Fuel Gas Piping, Manifolds and Gas Meters**

### **a) Fuel Gas Piping:**

#### **1) Location:**

The fuel gas piping inlet shall be located above ground from the meter outlet to the primary structure wall in accordance with Figures 5, 6 & 9, unless an approved Above Ground Multi-Meter Manifold is installed (see Figure 7).

#### **2) Elevated Pressure:**

All elevated pressure requests must be made prior to installation of fuel gas piping to ensure adequate distribution system pressure is available. Elevated pressure requests can be initiated by contacting Colorado Springs Utilities Field Engineering. All elevated pressure installations shall be adequately labeled or tagged with the words “Elevated Pressure”.

If changes are made to the total connected load that has been approved, Colorado Springs Utilities reserves the right to require a new application be submitted before the gas meter

is installed.

- 3) All remodels that require a larger meter need to have the gas service line size re-evaluated by a Colorado Springs Utilities Field Engineer.

**b) Meter/Riser Manifolds:**

**1) Location:**

All gas service risers shall be located and installed in accordance with Figures 2 through 9 as applicable. Each gas service riser shall serve only one meter unless an Above Ground Multiple Meter Manifold assembly has been formally approved by Colorado Springs Utilities (see Figure 7). The intended gas service riser shall be clearly indicated by a yellow paint mark on the structure foundation prior to service line installation.

**2) Prefabricated, Welded, and Below Ground Multiple Meter Manifold:**

Prefabricated polyethylene-insert type anodeless gas service risers shall not be bent or altered. Heating or welding of polyethylene-insert type anodeless gas service risers is prohibited. All gas service risers and gas service line connections shall be properly supported on well-compacted soil to prevent damage during back-filling and compaction, and to prevent settling. After back-filling, the gas service riser shall be in a vertical position. The minimum depth of the entire Manifold assembly shall be 24 inches.

- 3) All 1-1/4 inch and larger risers shall have a bypass installed.

**EXCEPTIONS:** Buildings with multiple risers shall have a bypass installed every 10 to 12 feet, instead of every riser. If the distance between the risers on the underground manifold exceeds 12 feet, a bypass shall be installed on every riser.

- 4) All ~~2-inch and other~~ welded gas service risers and welded steel multiple meter manifolds shall be field wrapped in accordance with Figure 11.
- 5) All polyethylene multiple meter manifolds shall be constructed and installed in accordance with Figure 6. Horizontal stair stepping or vertical stacking of multiple meter manifolds is prohibited unless Above Ground Multiple Meter Manifold assemblies have been formally requested by the LUSI, Developer, and/or property owner, and approved by the Colorado Springs Utilities Energy Construction Operations and Maintenance Department (see Figure 7). All gas service risers shall extend in a straight and perpendicular fashion from the manifold header.
- 6) Every effort shall be made by LUSIs to utilize prefabricated anodeless risers or polyethylene multiple meter manifolds.

**c) Above Ground Multiple Meter Manifolds:**

**1) Request Procedure:**

- a) Requests for Above Ground Multiple Meter Manifold systems will only be considered for structures intended to serve 3 or more individual residential tenants, owners or occupants.

**Multiple unit commercial structures intended for business use will not be considered.**

- b) Submit to Colorado Springs Utilities Field Engineering a fully dimensioned project drawing indicating all building footprints, proposed meter set locations, proposed number of meters per set location, electric meter locations, air supply/heating vents, and other sources of migration and/or ignition.
- c) All fuel line and riser configurations must be constructed according to the dimensional requirements indicated in Figure 7, unless otherwise specified in writing by Colorado Springs Utilities.
- d) All gas service lines shall be constructed according to the specifications of the currently approved Colorado Springs Utilities Gas Line Extension and Service Standards Manual. However, the polyethylene service line diameter may be specified by Colorado Springs Utilities Field Engineering. Gas service line installations will be individually inspected for workmanship throughout installation process.
- e) All anodeless risers for Above Ground Multiple Meter Manifold assemblies shall be 1-1/4 inch, unless otherwise specified.
- f) All fuel lines through structure walls shall be black iron threaded piping unless otherwise specified in writing by Colorado Springs Utilities Field Engineering. House lines shall be secure and level.

All fuel lines are required to be labeled with a stamped brass tag attached with #12 wire which clearly identifies the premise it serves. If incorrect tagging or addressing creates inaccurate information in Utilities records, the owner of such premises will be responsible for actual time and material charges incurred by Utilities to correct the situation. The resolution of billing inaccuracies due to incorrect tagging or addressing will be the responsibility of the Owner and the Customer or user.

- g) After a request has been approved and the requester has completed construction of the fuel line and riser configuration according to Figure 7, and/or other specified dimensions required by Colorado Springs Utilities Field Engineering, the requester must initiate the meter set assembly by calling the Colorado Springs Utilities ~~Field Service Department~~ Field Services (719-668-~~73547350~~). This process will include an inspection for adherence to applicable dimensional requirements. The inspection will be scheduled after a Gas account from Colorado Springs Utilities Contract Administration and a Final Heating Inspection from the Regional Building Department have been obtained for each building unit to be served.
- h) The Colorado Springs Utilities ~~Field Service Department~~ Field Services will provide all meter set assembly materials with the exception of the service line, riser and fuel lines.
- ~~h)~~
  - i) After installation of an Above Ground Multiple Meter Manifold, any elevated pressure and/or gas load increase requests may require the construction of a new and separate service line and meter set. Since all meters on the manifold assembly must operate at the same pressure, an elevated pressure would require the entire manifold to operate at the proposed elevated pressure. The cost associated with additional

construction shall be borne by the owner or tenant of the structure requesting elevated pressure and/or a load increase. All elevated pressure installations shall be adequately labeled or tagged with the words "Elevated Pressure".

**Note:** Before the lock is removed from the gas meter manifold a permanent address is required for each separate premise.

If addresses are changed after the Certificate of Occupancy has been issued, the owner of such premises will be responsible for actual time and material charges incurred by Utilities to correct the situation. The resolution of billing inaccuracies due to changes in addresses will be the responsibility of the Owner and the Customer or user.

**d) Meter:**

Colorado Springs Utilities meters will be sized and installed according to current load. Future loads will be re-evaluated as appliance(s) are inspected and approved by Regional Building. The final meter size shall be determined by Colorado Springs Utilities ~~Field Measurement Services~~Field Services.

**1) Residential Gas Meter:**

- a) On single family residential construction where the total connected load is 390,000 BTU/HR or less, a gas meter bar/meter will be installed (3/4 inch and one inch risers only). Field Service will lock the meter valve off at the time of the installation if all three of the following conditions have not been satisfied. Lock will be removed after all are completed:
  - 1) Heating inspection or construction meter inspection is completed by Pikes Peak Regional Building Department (719-327-2883)
  - 2) The property owner has set up an account with the Customer Service Department for billing (719-448-4800)
  - 3) The site has been inspected by a Field Service Inspector (719-668-~~7354~~7350).
- b) Field service will make the final connection from the outlet side of the gas meter bar/meter to the fuel line stub.

**2) Commercial Gas Meter:**

- a) Commercial gas meters or gas meters with a total connected load greater than 390,000 BTU/HR will only be installed by Colorado Springs Utilities ~~Field Service Department~~Field Services after the following three things take place:
  - 1) Heating inspection or construction meter inspection is completed by the Regional Building Department (719-327-2883)
  - 2) The property owner has set up an account with the Customer Service Department (719-448-4800)
  - 3) The site has been inspected by a Field Service Inspector (719-668-~~7354~~7350).

\*All commercial gas meter sets require a minimum 1-1/4 inch riser. The riser shall be installed 16 to 18 inches out from the final exterior finish of the structure.

- b) For additional commercial meter equipment see Figures 12 & 13.
- c) The Field Service Inspector will determine estimated facility gas loads for developer refund calculations and meter sizing. A Utilities Service Specialist from Colorado Springs Utilities ~~Field Service Department~~ Field Services will then install the new meter if the following conditions are satisfied:

### 3) Meter Set Location:

- a) All gas meter sets shall be in an outside location adjacent to a building easily accessible for gas meter reading and maintenance.
- b)** Preferred CSU residential natural gas meter location is on the side of the structure and within 5 feet of the front corner of the structure closest to the gas main, or on the front wall of the structure facing typical public access, or that which is nearest to the gas main. It is preferred to have both the natural gas and electric meters located on the same side of the structure. See Figure 4A.

**c) Construction Heat: A construction meter will not be allowed unless the customer meets with Colorado Springs Utilities Field Engineering and receives a Non Standard Meter Loop agreement form. This will be determined on a case-by-case basis.**

**~~b)~~**

**e)d)** All gas meter sets shall be in accordance with the following requirements:

#### 1) Primary Structure:

- a) A separate gas meter location shall be provided for each building, unit or structure which can be individually separated by sale or lease unless Multi-Meter Above Ground Manifolds have been formally requested by the LUSI, Developer and/or property owner and approved by Colorado Springs Utilities. Each separate structure shall have a plainly visible address attached, as applicable.
- b) All gas service risers are to be located such that the service regulator vent will be at least 3 feet radially from any potential source of ignition (to include electric meter socket and panel), doorway, electrical device, garage door, electrical outlet, operable window, or any opening to the structure, as outlined in Figure 9 [per UPC 1209.6(c), DOT 192.353(c), 49CFR192.355, 356, and chapter VII Office of Pipeline Safety]. The service regulator vent will be typically located at the same height as the fuel gas inlet piping.
- c) All gas service risers are to be located such that the service regulator vent will be at least 3 feet from any forced air intake/exhaust vent (including dryer vents, foundation vents, fireplace makeup air inlets and/or sump pump outlet drains), as outlined in Figure 9. All fresh air opening location clearances shall be located per local codes and IMC 401.4.

- d) All gas meter sets shall be located a minimum of 6 inches away from decks, stairways, or other objects which may interfere with gas meter reading or maintenance. A 3 foot meter clearance needs to be maintained from openings and electrical sources (Refer to Figure 9 for additional clearances)<sup>[PB1]</sup>. No gas meters shall be installed at an alley or property line.
- e) As a condition of utility service, it is necessary for Utilities to have access to the final gas meter location at all times for the purpose of: Installing, constructing, renewing, replacing, removing, relocating, operating, maintaining, reading, inspecting, repairing, testing and test upgrading of any portion of the distribution system located on or within the boundaries of the premises. Gas meter loop locations shall be located where there is minimum slope between the riser and house line (to be determined by the Field Service Inspector).

Trimming or removing vegetation or other obstructions may be required if we determine there is a safety hazard or access issue which interferes with the operation or maintenance of the gas meter or associated piping, including, but not limited to, retaining walls, enclosures, and landscaping.

- f) Any carport, porch, or patio designed to be installed over any Colorado Springs Utilities meter and/or service line is to remain open on 3 sides with protective guard posts (bollards) installed around the meter/service line, as shown in Figure 10.
- g) All gas meter sets shall be located clear of direct water contact from sprinklers and/or roof runoff to include gutters and roof drains. Where it is impractical to avoid roof runoff, gas meter sets shall be covered by a means approved by the Colorado Springs Utilities ~~Field Measurement Services~~Field Services. All gas meter sets shall be located such that no part of the set obstructs any portion of a passageway, access or stairway.
- h) All gas meter sets shall be located clear of vehicular traffic. Where it is impractical to avoid vehicular traffic or the meter is to be installed within 3 feet of a curb, parking lot or vehicular thoroughfare, the gas meter set shall be protected by approved guard posts (bollards) installed in accordance with Figure 10. Bollards shall be installed before the lock is removed. All meters located in “drive through” areas shall be approved by Colorado Springs Utilities ~~Field Measurement Services~~Field Services. Meters shall not be located in the traffic area of a loading dock.
- i) The minimum distance that padmount transformers and generator equipment may be located from any part of a gas meter, gas regulator, or gas meter piping is 15 feet. This distance may be reduced to 6 feet minimum if a solid masonry wall is built between the two. The minimum distance from the masonry wall to the gas meter, or any portion of the meter set piping, shall not be less than 3 feet. The masonry wall must be made of reinforced concrete, reinforced brick, or reinforced concrete block, with a minimum 3 hour fire rating. The wall must be at least twice the width of the transformer or generator, and at least 6 feet tall. If the generator equipment is greater than 6

feet in height, the wall must be equal to or greater in height than the equipment. The wall shall be anchored to the footing to withstand a minimum of 5 lbs. per square foot of wind load, and meet all applicable local building codes. See [CSU Colorado Springs Utilities](#) Electric Distribution Construction Standards, 18-227, Note 2.

- ~~h)~~
- j) Gas meter sets located near a Fire Department Connection (FDC) must be no closer than 3 feet to the left or right (not above) of the subject FDC.
- k) The gas fuel line piping inlet shall be located above ground from the meter outlet to the primary structure wall it is serving.
- l) Elevated Pressure: All elevated pressure requests must be made prior to the installation of fuel gas piping to ensure adequate distribution system pressure is available. Elevated pressure requests can be initiated by contacting Colorado Springs Utilities Field Engineering. All elevated pressure installations shall be adequately labeled or tagged with the words "Elevated Pressure".
- m) Added gas load tie ins will be inspected by Colorado Springs Utilities Field Services. Tie in location will not be accepted unless tie in point is outside the Colorado Springs Utilities meter loop (see Figure 8). Colorado Springs Utilities meter bypass will not be accepted as a tie in point (see Figure 8b). All house lines will be secured and level before tie ins will be accepted.

~~h)~~

## 2) Additional Structures:

Each separate, additional, structure shall be served by a single and separate gas service line, riser and meter where practical. If a property **cannot be separated by sale or lease** and a separate gas service line, riser and meter are impractical and downstream underground piping from the primary meter to additional buildings is required, the following is required **before Colorado Springs Utilities will set a meter:**

- a) A detailed map showing all additional structures and the underground fuel gas piping.
- b) A piping inspection (air test) approved by Regional Building Department or the Code Official who has jurisdiction.
- c) Review of the "Natural Gas Customer Buried Piping" fact sheet, making the property owner aware of their responsibility to leak survey and monitor for corrosion on the downstream underground fuel piping located on their property (corrosion protection is required for steel piping). It is crucial that the property owner is aware that they will be held liable for any incident that occurs on this piping.

The "Natural Gas Customer Buried Piping" fact sheet is located on the Colorado Springs Utilities website at [www.csu.org/Pages/development-files-](http://www.csu.org/Pages/development-files-)

forms.aspx, the Pikes Peak Regional Building Department website at www.pprbd.org, and in Table 12.

Please refer to The Code of Federal Regulations (CFR) Sections:

- 192.12 – Customer Notification
- 192.465 – External Corrosion Control; Monitoring
- 192.723 – Distribution Systems; Leakage Surveys

#### 4) Additional Requirements:

- a) A concrete gas meter pad (24”x 30”x 4”) shall be installed for all gas meters serving total connected gas loads of 1,400,001 BTU/HR and larger unless otherwise specified by the Colorado Springs Utilities Field Service Department.
- b) When numbering or lettering schemes are changed and/or incorrect tagging creates inaccurate information in Colorado Springs Utilities records, the owner of such premises shall be responsible for actual Time and Materials fees incurred by Colorado Springs Utilities in order to correct the situation.
- c) Except as allowed by Colorado Springs Utilities, new Master Meters and/or new Master Meter Systems shall be prohibited. Exceptions include assisted living, student housing, or other similar purposes, and must be approved by Field Engineering. At least one meter per building is required. An existing master-metered customer may “check meter” tenants, lessees or other persons to whom ultimately the gas is distributed by an allocation procedure, provided the master-metered customer does not receive more than necessary to pay the master-metered bill. Colorado Springs Utilities will supply and maintain only the one master meter in such an instance.
- d) A non-standard loop agreement is required on any residential, commercial or industrial gas meter loop that deviates from the following specifications as set forth in this manual (see form at the end of Chapter 2 & Figure 6):
  - 1) Horizontal distance from the gas service riser to the finished exterior building wall
  - 2) Horizontal distance from the gas service riser to the fuel gas piping inlet
  - 3) Vertical distance from the gas service riser to the fuel gas piping inlet
  - 4) Vertical distance from finish grade to the top of inlet shut off valve and,
  - 5) If the total connected load meets or exceeds 910,001 BTU/HR and meter dimensions require the set to be right-to-left.
- e) When a gas service line has been disconnected and the gas meter is found to be located at an unacceptable location, such as the property line, the gas meter shall be relocated in accordance with these specifications before service is re-instated.
- f) Gas meters may be situated in “meter banks” where more than one building unit is served within a single building and only when approved by Colorado Springs Utilities Field Service Department. Each fuel gas piping inlet shall be tagged with an approved



brass tag, affixed with #16 gauge metal wire, which indicates the address served by the fuel gas piping. Gas meters will not be installed until all gas meter loops are properly tagged.

#### 5) Additional Requirements for School Meters:

The gas meter for a school is set by Colorado Springs Utilities ~~Field Service Department~~ Field Services after the following conditions take place (all must be met):

- a) Colorado Springs Utilities Field Engineering has received and approved a fully dimensional project drawing indicating **ALL** primary structure and modular(s) building footprints with the proposed meter set locations.
- b) A final piping inspection (air test) has been completed on the interior fuel line and approved by the code official who has jurisdiction. Typically, this is either the State of Colorado or The Pikes Peak Regional Building Department.
- c) An account for billing has been created by Colorado Springs Utilities Customer Services Department.

*A separate billing address is required for each separate building, modular or structure.*

- d) Service Line has been tied-in.
- e) A gas meter loop inspection has been completed along with an itemized load breakdown. This inspection is completed by a Colorado Springs Utilities Industrial Gas Fitter.
  - 1) *At the time of the meter loop inspection if you have encountered difficulties in carrying out the requirements of these specifications, the Industrial Gas Fitter has the authority to grant modifications for individual cases provided you have exhausted every option available to you. The details for requesting the modifications must be in writing on the non-standard loop agreement form.*
  - 2) *The modification(s) will be rejected if it is determined they have the potential to create a safety hazard, lower the integrity of Colorado Springs Utilities gas distribution system or create unnecessary work for Spring Utilities personnel.*

- f) Permanent meter protection is in place:

- 1) A 6 foot high fence with a 6 foot by 6 foot access gate opening (this is mandatory).
- 2) Guard Posts – (only when meter is in a location of vehicular traffic)

- g) The gas service riser, gas meter and fuel line piping shall be secured in a protected area by the following:

- 1) Gas meter sets located at all schools shall have a 6 foot high fence with a 6 foot by 6 foot access gate enclosing the gas meter set. The meter set shall be located adjacent to a building. Minimum clearance of 3 feet is required from the front of

the meter to the fence for meter maintenance.

- 2) For the safety of all Colorado Springs Utilities' employees who need access to the protected area for any gas meter related work a service road needs to be provided for a vehicle to get as close as possible.

**h) Back Up Generators for Schools:**

- 1) If a natural gas backup generator is required, contact Colorado Springs Utilities Field Engineering to determine if a separate gas service line, riser and meter are required.

**6) Re-Inspection Fees:**

- a) A graduated fee will be assessed for **ALL** repeat inspections. Absence of a visible address with a street name at the inspection location will result in a fee for re-inspection. In the absence of permanent street name signs, a temporary street name sign will be required.

**e) Gas Meter Testing:**

1) Acceptance testing for new gas meters:

- a) All new gas meters received by Colorado Springs Utilities are certified and tested by the manufacture for accuracy.
- b) Colorado Springs Utilities performs a sample test of 10 percent of all new residential gas meters to verify accuracy. Residential gas meters must be plus or minus 0.5 percent accurate to pass the acceptance testing.
- c) Colorado Springs Utilities performs a sample test of 100 percent of all new commercial and industrial gas meters to verify accuracy. Commercial and industrial gas meters must be plus or minus 0.5 percent accurate to pass the acceptance testing.
- d) All rebuilt or repaired gas meters will follow the same accuracy limits as denoted in 4.05(e)1b & c before being placed in service.

2) Gas Meter Periodic Test Schedule:

- a) Gas meters not tested since original acceptance test will be periodically tested. Gas meters must be plus or minus 2 percent accurate to pass the periodic test.

## **4.06 Materials**

All materials covered in this manual shall be new and free from obvious or visible defects and shall conform to the Colorado Springs Utilities Natural Gas Material Specification Manual. Materials approved for use in gas service line construction are detailed in Table 7.

**a) Pipe and Fittings:**

Polyethylene pipe and fittings shall be limited to those listed on Table 7 and shall bear all pertinent markings as specified in the Colorado Springs Utilities Natural Gas Material Specification Manual for polyethylene pipe and fittings.

All polyethylene pipe shall be free of material defects. Sections of pipe with gouges deeper than 10 percent of wall thickness of the pipe shall be removed and replaced.

**b) Risers:**

All gas service risers shall be approved prefabricated polyethylene-insert type anodeless risers as noted in Table 7, unless fabricated by Colorado Springs Utilities. All gas service risers larger than 2 inches ~~and larger~~ shall be welded steel risers fabricated by Colorado Springs Utilities Machine Weld Shop.

**NOTE TO INSTALLERS:** If installing a ~~2-inch~~ welded steel riser, CSU Gas Construction Quality Control Inspections (719-668-3667) must be contacted a minimum of 5 working days prior to the scheduled appointment so arrangements can be made for a Colorado Springs Utilities welder to be on site for the scheduled appointment to weld the steel valve onto the riser.

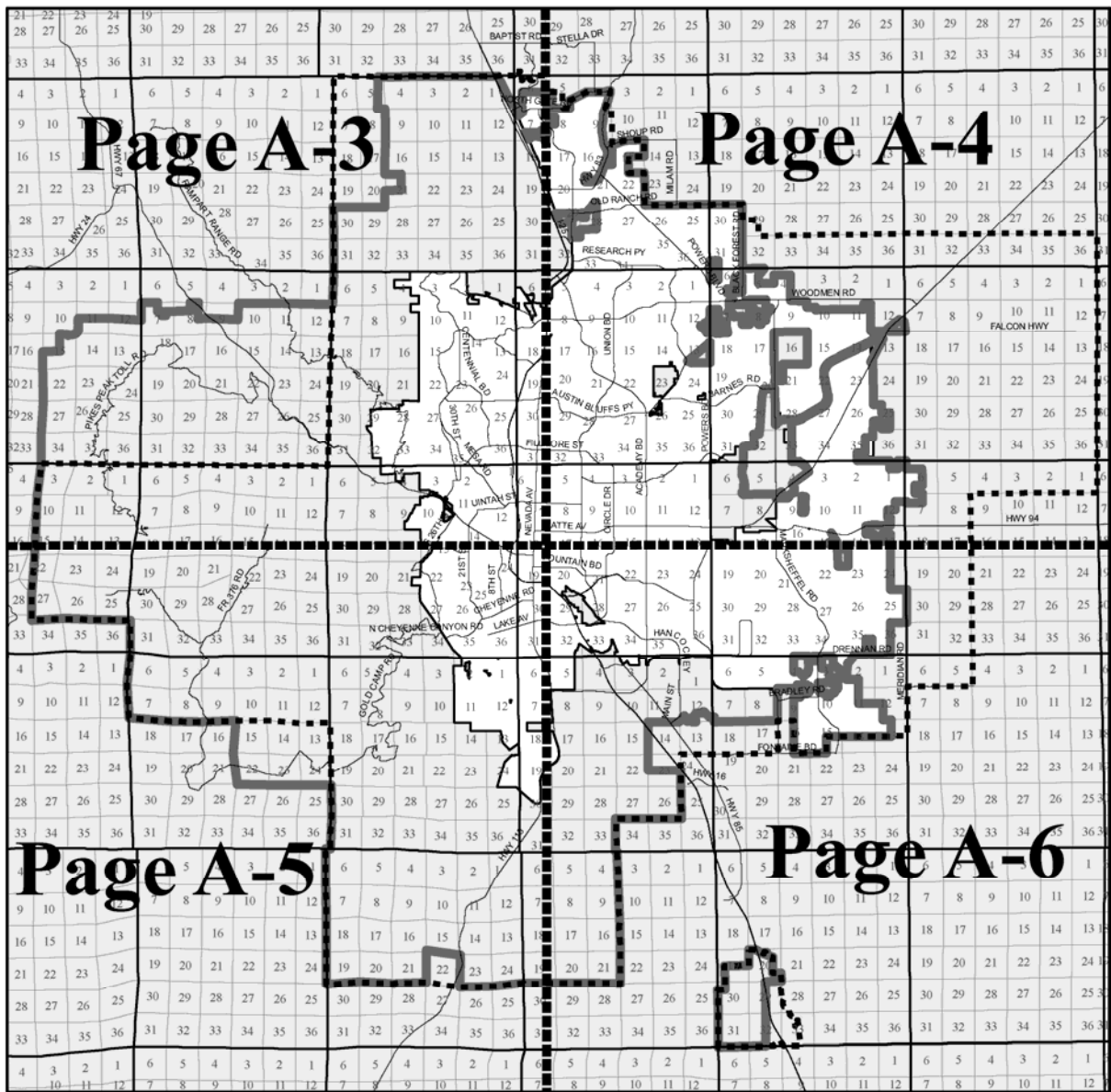
# Appendix A

## Colorado Springs Utilities Service Area Boundaries

### A.1.0 INTRODUCTION

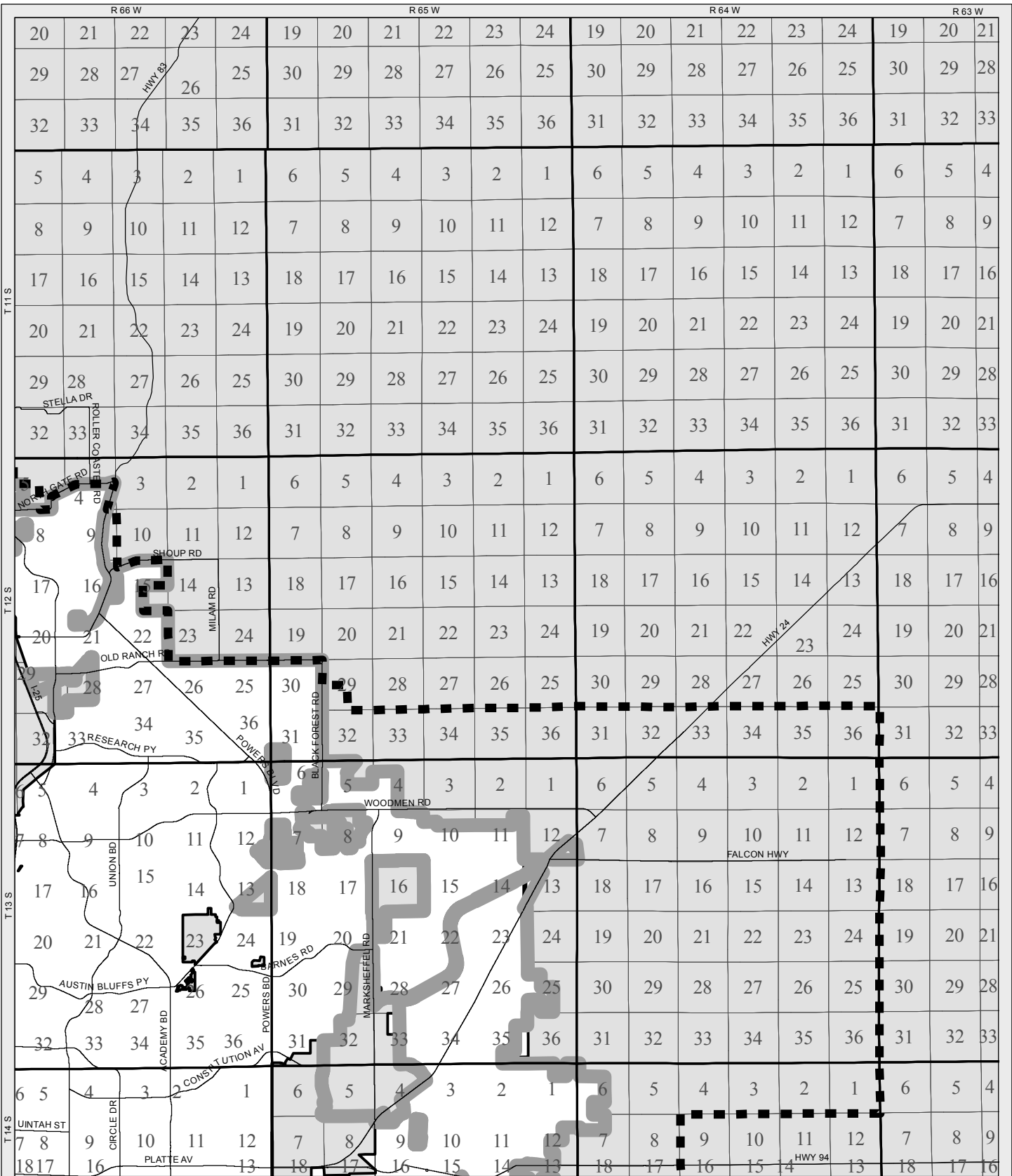
The maps on the following pages depict the Colorado Springs Electric and Gas Service area boundaries as filed with the Colorado Public Utilities Commission and are up to date as of the date of the publication of this manual. The City of Colorado Springs limits are shown from the best information available as of the date of publication. Colorado Springs Utilities water and wastewater service area is generally limited to those areas within the current city limits (see Index Map below). Specific questions regarding utility service should be directed to Colorado Springs Utilities Development Services office.

A more detailed, larger scale version of the service area map can be obtained from the Colorado Springs Utilities web site at [www.csu.org](http://www.csu.org).



Index Map








Colorado Springs Utilities  
It's how we're all connected

Scale 1" = 14000'

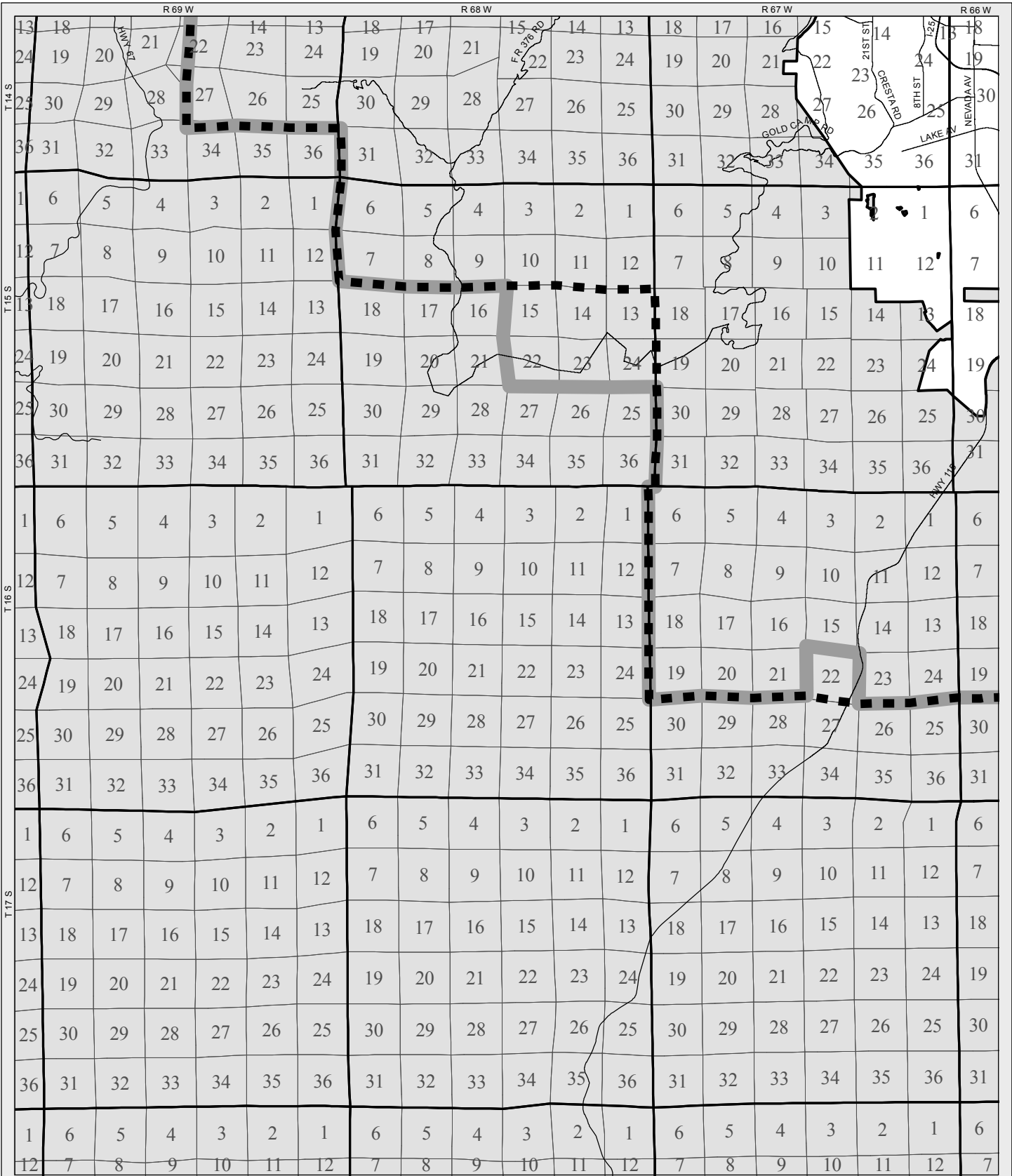


**Legend**

-  Electric Service Area
-  Gas Service Area
-  Colorado Springs Boundary
-  Section Lines
-  Township/Range Lines

**Colorado Springs Utilities  
Service Area Boundaries**

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



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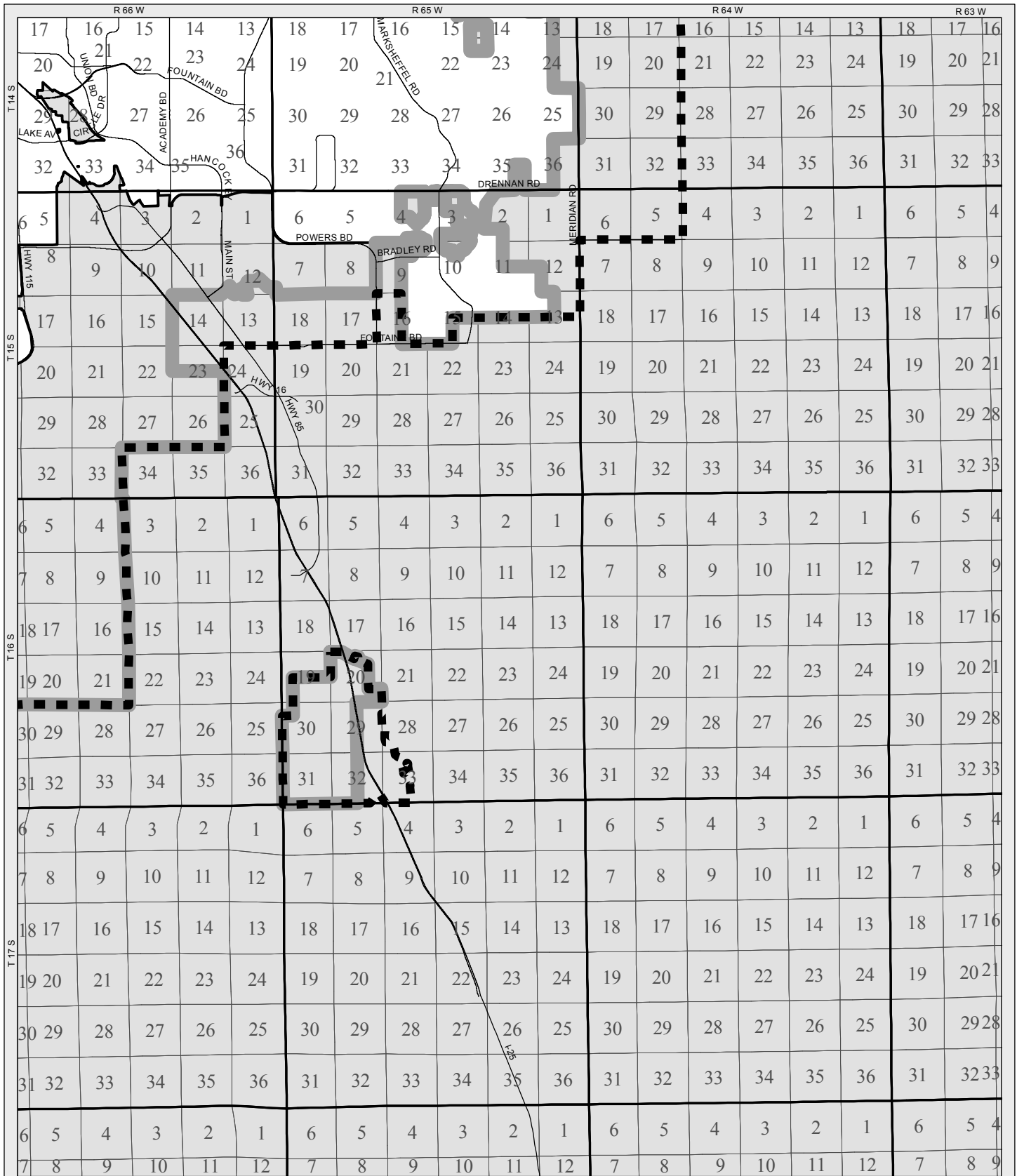


**Legend**

-  Electric Service Area
-  Gas Service Area
-  Colorado Springs Boundary
-  Section Lines
-  Township/Range Lines

**Colorado Springs Utilities**  
**Service Area Boundaries**

**Page A-5**





Colorado Springs Utilities  
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Scale 1" = 14000'



**Legend**

-  Electric Service Area
-  Gas Service Area
-  Colorado Springs Boundary
-  Section Lines
-  Township/Range Lines

**Colorado Springs Utilities  
Service Area Boundaries**

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**UTILITIES ADDRESSING PLAN,**  
**UTILITIES DESIGN CAD FILE AND EASEMENTS**  
**Policies and Procedures Guide**

## **B.1.0 INTRODUCTION**

Interaction with Colorado Springs Utilities (SU) on any land development project requires supporting documentation. This information is unique to a given type of service (i.e. electric, gas, water or wastewater). There are two types of support data that are universal to all service extensions: the Utilities Addressing Plan (UAP) and the Utilities Design CAD File (UDCF). Depending upon the nature and timing of your project you may need to submit a UAP and/or a UDCF as part of the flow of information to SU in support of the design or review of your proposed utility infrastructure. It is best to be aware of these two items as well as potential easement requirements in advance of your first contact with SU regarding a given project. The following Sections describe each item in detail.

## **B.2.0 UTILITIES ADDRESSING PLAN**

The UAP is a submittal that must be made, under certain circumstances, to SU prior to initiating a request for utility design review or service extension from SU. The content of the UAP is similar to that of a subdivision plat (see FORM 1 for the UAP checklist). In fact, a copy of the subdivision plat prepared per the City of Colorado Springs Code pertaining to Subdivision Platting will suffice as a UAP submittal. SU/Land Base Services (LBS) uses the UAP to obtain addressing from the Regional Building Department's (RBD) enumerator's office for the lots in the project. SU/LBS convert lot geometry for the proposed project to the cadastral layers of the LBS database and create address pointers for the lots. The LBS cadastre, address data and SU's Customer Care and Billing (CC&B) system are synchronized using this information.

### **B.2.1 CONDITIONS CALLING FOR A UTILITIES ADDRESSING PLAN**

A Utilities Addressing Plan is required to be submitted to SU anytime an application for the design of extensions of electric, gas, water or wastewater mains and/or service lines is made and any of the following conditions apply:

- The request for service applies to a parcel of land that does not have a recorded final subdivision plat and assigned addressing in place as of the date of the request.
- The request for service applies to a parcel of land which may have an existing recorded plat in place, but the existing parcel geometry will be modified as part of a land development process and the replat is not yet of record.
- The request for service applies to a parcel of land for which an approved UAP exists, but changes have been made (or are proposed) to the geometry of the development which substantially affects the lot or street configuration of the development.
- The proposed development activity will in any way change approved addressing on the site.

## B.2.2 PURPOSE OF THE UTILITIES ADDRESSING PLAN

The UAP serves two critical purposes in the land development process. Information provided on the UAP allows SU/LBS to create preliminary lot and street geometry in the LBS database (in cooperation with the RBD's enumerator's office). Approved addressing is entered into the FIMS database which in turn is tied to the SU CC&B system. With this in mind, consider the UAP as a "Preliminary" version of the final plat. The data elements to be shown are nearly identical to a final plat and in fact, an unrecorded copy of the final plat of the project is an acceptable UAP.

## B.2.3 UTILITIES ADDRESSING PLAN SUBMITTAL

The UAP can be submitted in either hardcopy format or electronically. The UAP must be submitted at least five (5) working days prior to the need for SU's action on a request for service. Requests for service may be submitted concurrently with the UAP, but will not be acted upon until after the UAP has been processed.

A revised UAP must be submitted whenever boundary, right-of-way, lot or easement lines or dimensions are revised, or if addresses or street names are changed.

### Digital submittal

Digital UAP submittals SU are the preferred method. Digital submittals may be performed online using the Digital Data Services web link (<https://www.csu.org/jdas/index.jsp?pg=200>). When a submittal is made online, a receipt is emailed to the user. This receipt must accompany the request for utility service, as evidence that the UAP has been processed. A digital submission shall consist of an AutoCAD drawing (.dwg) file with a layout for each sheet (where there are multiple sheets to the plan) of the proposed project including all necessary model and paper space elements to enable LBS staff to print hard copies. For information or assistance in performing online UAP submittal, contact SU/LBS at (719) 668-8340 or C\_LBSSupport@csu.org.

## B.2.4 UAP FREQUENTLY ASKED QUESTIONS

### Do I need to have accurate and correct dimensioning for lots and streets centerlines on the UAP?

Although a preliminary version of the plat is acceptable for the UAP, fictitious, incomplete or erroneous plat geometry is not. SU needs sufficient information on the UAP to be able to run coordinate geometry on the boundaries, the rights of way, tracts and each individual the lot. Missing or erroneous data will only delay the UAP processing because LBS staff will refer the errors back to the submitter for correction before completing the UAP.

## B.3.0 UTILITIES DESIGN CAD FILE

The Utilities Design CAD File (UDCF) is an AutoCAD (.dwg format) drawing file which contains specific point, line and text features related to the design and analysis of new utility lines in proposed land developments and public works projects. Defining the content and structure of the CAD data to be received allows LBS to position the UDCF file, enabling SU system designers to provide a more efficient design process for each land development customer. The primary use of the UDCF is to meet the requirements of the water, gas and electric system designers. It will contain electronic feature data (see TABLE A for a list of recommended features) needed to do CAD based system design and analysis on new service system extensions. For residential projects, the UDCF contains most of the

features on the water service plan. For commercial, multifamily and industrial projects, the UDCF will include the features from the site plan or site/utility plan. A secondary use of the feature data contained in the UDCF will be to update the planimetric base and utility mapping used by SU.

All dimensional data shall use AutoCAD drawing units of:

- Length: Decimal (Precision 0.00)
- Angle: Surveyor's units (Precision N 0d 00' 00" E)
- Insertion Scale: Unitless.

### **B.3.1 CONDITIONS CALLING FOR A UTILITIES DESIGN CAD FILE**

A Utilities Design CAD File is to be submitted:

- For all projects that require utility system extensions or relocations.
- For all single-family residential projects that create new lots or rights of way through the subdivision platting process.
- For all mobile home parks, multifamily residential developments, commercial and industrial projects.

### **B.3.2 PURPOSE OF THE UTILITIES DESIGN CAD FILE**

The Utilities Design CAD File will be used by the water system planners to model pressure zones, by the gas and electric system designers as a background environment to support their system extension design, and possibly by SU's Asset Management department to update planimetric base or utility mapping. The customer is responsible for ensuring that the project data supplied to CSU is current through all of the project design phases. If CSU does not have the most up to date version of project data, its construction schedule could be negatively impacted. The customer consents to CSU's use of the electronic data being used to update CSU/LBS base mapping.

### **B.3.3 UTILITIES DESIGN CAD FILE SUBMITTAL**

A Utilities Design CAD File (UDCF) is to be submitted to the Colorado Springs Utilities (CSU) prior to or at the same time any application for water or wastewater plan review or service extension design is initiated. It may be submitted at the time of a UAP submittal or any time thereafter. The file is to be submitted to CSU's LBS Unit (1521 Hancock Expressway) or via an Internet application (<https://www.csu.org/jdas/index.jsp?pg=200>). CSU/LBS will process the file by registering it to the FIMS horizontal datum and making it available to all CSU departments.

The CAD file to be submitted shall be a .dwg format file containing all applicable feature elements listed in Table A in model space. The Utilities Design CAD File shall be complete. One and only one file is to be submitted. Any XREFs need to be bound to the parent file. Features shall be placed on separate layers. Processing can be expedited if the layer organization delineated in Table A is followed. Residential subdivision projects shall include pertinent elements checked under the Residential column of Table A. All other development types (commercial, multifamily residential, industrial and mobile home parks, Municipal and State projects) shall require that the CAD file include pertinent feature types checked under the column titled All Others. Generally speaking, on residential projects, the UDCF will contain the same feature data as the water service plan and on

commercial and multifamily projects the UDCF will contain the same feature data as the site plan or the site/utility plan.

### **B.3.4 UDCF FREQUENTLY ASKED QUESTIONS**

#### **What is the UDCF used for?**

The UDCF is needed for efficient system modeling and design of new utility infrastructure. The UDCF is processed by **SU/LBS** to position the model space features contained in the file onto the FIMS horizontal datum. The file structure is checked **to ensure** the file will be readable by all of the CAD desktops within CSU and is then made available on a server that is accessible to all CSU system designers.

The UDCF data may be used to maintain the FIMS planimetric database. **Certain** features will be verified and converted to keep the planimetric base mapping up to date. It is hoped that **SU** will realize long term cost savings for our ratepayers by reducing the number and frequency of aerial mapping projects needed to map areas of development activity.

#### **I have several .dwg files that are not XREF'd for my project, how can I submit them?**

Although we accept zipped files for large .dwg files we cannot accept multiple files zipped together, they must be merged into one .dwg file (using the X-REF/BIND command in AutoCAD). Do not use the re-submit option as a method to upload multiple files.

#### **Does the UDCF have to conform to a certain layering standard?**

No. Although Appendix A indicates the recommended layer structure, this is not a requirement. Processing the file can be made more efficient if the file conforms to the recommended layering structure, but it is not a requirement of the process.

#### **Who will be responsible for assuring that the UDCF is accurate, complete and up to date?**

**Ultimately, the customer is responsible for the content of the file.** **LBS** will perform a quick check **ensure** the file appears to be complete. If obvious inadequacies exist, **LBS** will contact the customer to remedy the situation. Missing or inaccurate data may affect the timing of design or construction schedules. The customer will be responsible for submitting an amended file should any of the projects feature details change after the time of the initial submittal but prior to completion of the use of the data by water, gas, and electric designers. The online application was designed to make iterative resubmission of data more convenient for the **SU's** customers. **SU** representatives will make every effort to remind the customer at each application stage to keep the file up to date.

#### **What about projects that are not done using CAD?**

It is recognized that there are still some small projects that may not be designed using CAD tools and there are still some design firms that do not employ CAD to accomplish project design. This submittal is not required if CAD data is not available. It should be recognized that plan review and new system design can be greatly expedited if a Utilities Design CAD File is supplied; otherwise CSU system designers will have to spend time manually **creating** key planimetric features to complete their work. The whole point in acquiring the file is to make the design process for each department more efficient.

### **B.4.0 EASEMENTS**

Development activity often requires an extension of CSU's infrastructure, which in turn may lead to the need for an easement or executive agreement. Across City property (not a Public Right – Of –

Way), an Executive Agreement is required. On private property, Easements are required when infrastructure is placed outside of a public right-of-way. Easements are typically granted either by a Subdivision Plat or by a Permanent Easement Agreement. Easements granted by Subdivision Plat are governed by the City of Colorado Springs Code pertaining to Subdivisions, as modified by the Terms & Conditions recorded at Reception Number 212112548. Easements obtained through a Permanent Easement Agreement are controlled by the Utilities' Standard Procedures for Easement Acquisition and Reference (SPEAR) process. CSU's webpage provides information about Easements and Executive Agreements, (<https://www.csu.org/Pages/development-files-forms.aspx>). The webpage also has an explanatory document that discusses the processes to prepare and obtain an easement.

#### **B.4.1 CONDITIONS CALLING FOR AN EASEMENT**

If utilities are installed outside of a public right-of-way or existing SU utility easement then a SU utility easement must be granted. The need for an easement may be triggered by a neighboring development or even a CSU initiated project that requires the installation of utilities across the property and not falling within a dedicated right-of-way or existing easement. These circumstances would require the recording of a Permanent Easement Agreement

#### **B.4.2 REQUIRED EASEMENT ELEMENTS**

SU's Permanent Easement Agreement has a standard set of Terms & Conditions, and three (3) exhibits. Exhibit A is a description of the parcel burdened by the easement. This description could consist of a reference to a platted lot, a metes and bounds description or an existing reception number / book and page. Exhibit B is a description of the easement area. Exhibit C is a graphical representation of the easement area described in Exhibit B. SU requires that Exhibit B be prepared, signed and sealed by a Colorado Professional Land Surveyor.

SU staff reviews the easement document for conformance to the design specification, and generally accepted surveying standard of care. During the review process comments may be referred back the Land Developer for review or revision. Upon acceptance by SU the easement is recorded at the Clerk & Records Office, and a recorded copy provided to the Land Developer.

#### **B.4.3 EASEMENT SUBMITTAL PROCESS**

Most easements dedicated to SU are initiated by the developer of the property in order to receive utility service. The need for a utility easement is identified during the Development Plan review process. The submittal process is explained on the SU website at the link given in 4.0 above.

Some of the key aspects are:

1. Always download the latest easement agreement forms from the SU website.
2. A licensed professional land surveyor must sign and certify that the exhibits prepared under their direct supervision, are accurate and correct to the best of their knowledge.
3. All owners and any Deed of Trust holders must sign the easement and ensure that their signatures are notarized.

#### **B.4.4 EASEMENT FREQUENTLY ASKED QUESTIONS**

How wide of an easement do I need to grant?

**In general,** a water or wastewater main requires a 30' easement width and a multi-utility easement is required to be 50' wide. Sometimes a wider easement is required based on characteristics of the line such as size, pressure, slope or depth of installation. **Contact** Development Services or refer to the appropriate standards to understand what the easement width might be for your utility installation project.

Can the utility be installed within an existing access easement?

**Not typically.** The Terms and Conditions of the actual easement agreement would need to be reviewed for language permitting the installation, maintenance and access to the infrastructure.

I need to dedicate an easement across multiple lots. What is the best way to do this?

If the multiple lots are owned by the same legal entity then the easement could be granted on a single easement. If the easement would include multiple owners it is required that the easement be split into multiple sections so that each easement is granted by a single legal entity. The exception to this is for property held jointly for which a standard easement agreement was prepared.

What rights do I as the owner retain within the easement area?

Springs Utilities Permanent Easement Agreement is very specific on what rights are granted to the City of Colorado Springs and what rights are retained by the property owner. Please refer to the easement agreement, contact Development Services or seek legal counsel for answers to more specific questions.

**TABLE 7****MATERIALS APPROVED FOR USE IN GAS/JOINT SERVICE  
LINE CONSTRUCTION**

<b>Item Description</b>	<b>Designation</b>	<b>Approved Manufacturer</b>
Anodes	1 pound, bare, magnesium alloy	Galvotec Alloys Inc. Farwest Corrosion Control Corrpro Co. Anode Systems
Pipe/Socket Fittings	PE 2406/2708, ASTM D2513 < 3 yrs. Old 3/4", 1", 2" SDR 11 1-1/4" SDR 10	Performance Pipe JM Eagle
Service Risers	Polyethylene Insert, Anodeless	
	<b>PE Size</b>	<b>THREADS</b>
	1" IPS SDR 11	1" NPT
	1-1/4" IPS SDR 10	1-1/4" NPT
	3/4" IPS SDR 11	1" NPT
	<u>2" IPS SDR 11</u>	<u>2" NPT</u>
Service Riser Bracket	T-41 (1-1/4" diameter pipe, adjustable 6"-10")	Energy Control Systems, Inc.
Tape	Split Bolts	3M Scotch 130C Linerless Rubber Splicing Tape
	Wrap- Primerless Tapecoat, M50RCG (2", 4" & 6") <u>Wrap – Gray Pipe Wrap Tapecoat, H35 UV Resistant (2")</u>	3M Scotch 33, 3/4" Tape  The Tapecoat Company
Thermite Weld Cartridge	15 Gram Charge	CadWeld
Copper Sleeve	For Tracer Wire	Continental A-200
Wire Connector	Direct Burial Split Bolt	Burndy Mechanical or Equiv.
Tracer Wire	Tracer wire, #12 soft-drawn CCS (copper clad steel), hdpe white insulation, 30 VAC (wire to either have nothing printed on it, or labeled "Natural Gas" or "Gas Pipeline"- all other labeling will be rejected)	Kris-Tech Wire Company Copperhead Industries, LLC Agave Wire, Ltd.



Item Description	Designation	Approved Manufacturer
Padding (Bedding Sand)	Fine Material able to pass a #40 sieve and retained on a #200 sieve.	<del>Colorado Silica Sand Fine Padding Material</del> <del>F.T. Sand &amp; Gravel Pond Silt</del> Daniels Sand, Cone Sand <del>LaFarge Pond Silt</del> <del>Pioneer Sand Company, Cyclone Sand</del>
4/0 AWG AL with 2/0 AWG AL Neutral Service Wire	600V UD “SureSeal” or “SuperSeal” Self-repairing wire types only	Southwire (SureSeal): <ul style="list-style-type: none"> <li>• Wesco- Utility, Denver</li> <li>• Western United Electric Supply</li> </ul> Pirelli/ Prysmian (SuperSeal): <ul style="list-style-type: none"> <li>• Wesco- Utility, Denver</li> <li>• Utility Products Supply</li> </ul>
350 MCM AL with 4/0 AWG AL Neutral	Abuse-Resistant type only	Southwire Pirelli (Prysmian) Alcan General Cable (BICC)
2” SCH 40 PVC	Electrical Rated (grey only)	All manufacturers including:  Carlton Cantex Heritage
3” & 4” DB120 or SCH 40 PVC	Electrical Rated (grey only)	All manufacturers including:  Carlton Cantex Heritage

**TABLE 8**

**CLEARANCE MATRIX FOR TYPICAL  
COLORADO SPRINGS UNDERGROUND UTILITIES**  
**(Separate Trenches)**

**HORIZONTAL CLEARANCE MATRIX FOR TYPICAL  
COLORADO SPRINGS UNDERGROUND UTILITIES**  
(all dimensions in feet)

All separations shown are the clear horizontal distance between two objects measured surface to surface  
~~(AWWA M24 Dual Water systems—see Water Line Extension and Service Standards, A7-9 & A7-10)~~

Colorado Springs Utilities (Underground):	Potable Water	Non-Potable Water	Waste-water	Storm Sewer	Gas mains 150 psig (MAOP)	Gas main	<u>Gas Service</u>	Electric Primary up to 34.5kV	Electric Secondary (0-480 Volt)
Potable Water	X	10	10	10	10	6	<u>3</u>	10	3
Non-Potable Water	10	X	10	10	10	6	<u>3</u>	10	3
Wastewater	10	10	X	<del>5/10*</del>	10	6	<u>3</u>	10	3
Storm Sewer	10	10	<del>5/10*</del>	X	10	6	<u>3</u>	10	3
Gas mains 150 psig (MAOP)	10	10	10	10	X	6	<u>6</u>	10	10
Gas main	6	6	6	6	6	X	<u>3</u>	6	3
<u>Gas Service</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>3</u>	X	<u>3</u>	<u>3</u>
Electric Primary up to 34.5kV	10	10	10	10	10	6	<u>3</u>	X	<u>03</u>
Electric Secondary (0-480 Volt)	3	3	3	3	10	3	<u>3</u>	<u>30</u>	X

**VERTICAL CLEARANCE MATRIX FOR TYPICAL  
COLORADO SPRINGS UNDERGROUND UTILITIES:**  
(all dimensions in feet)

~~(All dimensions are in feet)~~ All separations shown are the clear vertical distance between two objects measured surface to surface

~~(AWWA M24 Dual Water systems—see Water Line Extension and Service Standards, Water Construction Detail A7-9 & A7-10)~~

Colorado Springs Utilities (Underground):	Potable Water	Non-Potable Water	Waste-water	Storm Sewer	Gas mains 150 psig (MAOP)	Gas main	<u>Gas Service</u>	Electric Primary up to 34.5kV	Electric Secondary (0-480 Volt)
Potable Water	X	1.5**	1.5**	1.5**	5	1	<u>1</u>	1	1
Non-Potable Water	1.5**	X	1.5**	1.5**	5	1	<u>1</u>	1	1
Wastewater	1.5**	1.5**	X	1.5	5	1	<u>1</u>	1	1
Storm Sewer	1.5**	1.5**	1.5**	X	5	1	<u>1</u>	1	1
Gas mains 150 psig (MAOP)	5	5	5	5	X		<u>5</u>	5	5
Gas main	1	1	1	1		X	<u>1</u>	<u>1/5***</u>	1
<u>Gas Service</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>5</u>	<u>1</u>	X	<u>1</u>	<u>1</u>

Electric Primary up to 34.5kV	1	1	1	1	5	<u>1/5***</u>	<u>1</u>	X	<u>00</u>	
Electric Secondary (0-480 Volt)	1	1	1	1	5	1	<u>1</u>	<u>00</u>	X	

**NOTES:**

1. These clearance matrix table dimensions are for separate trenches. Joint trench between Electric and Gas requires a 1' radial separation.

~~2. See the Gas Line Extension and Service Standards, 2.02c for certain exceptions.~~

~~2. See Electric Line Extension and Service Standards, Chapter 7.02 for residential secondary, and Appendix F: 18-304 for primary.~~

3. See Water & Wastewater Line Extension and Service Standards, latest edition.

4. Clearance to other CSU utilities (telecommunication, fiber optics, etc.) or high voltage underground transmission cables shall be determined on a case by case basis by Field Engineering.

5. Storm Sewer clearances must be verified by City Engineering.

6. Larger clearances than shown may be required – clearances must meet all requirements set forth in all four of the Colorado Springs Utilities Line Extension and Service Standards, Colorado Springs City Codes, NEC, and NESC, latest editions.

7. Additional support structures may be required at crossings.

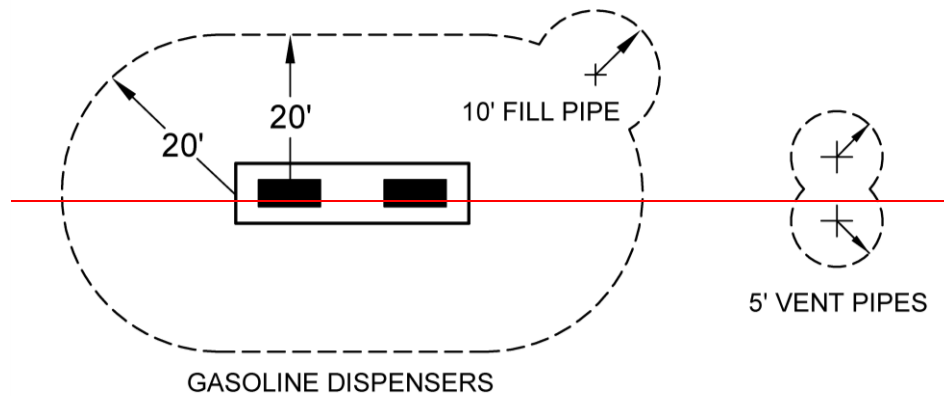
Note: All private ~~f~~Telecommunication and ~~f~~Fiber ~~o~~Optic cables must maintain a minimum radial distance of 5' (feet) from any Colorado Springs Utilities infrastructure (Electric, Gas, Water and Wastewater).

\*Note: All utilities must also be outside of 45 degree excavation envelope above the wastewater line—see Wastewater Line Extension and Service Standards, Wastewater Construction Detail C1-7. ~~(Storm drain of 24" diameter or less requires 5' minimum, over 24" diameter requires 10' min. between utilities)~~

\*\*Note: These utilities require a sleeve when crossing under another utility.

\*\*\*Note: 1' separation from electric primary to plastic pipe gas main and 5' separation from electric primary to metallic gas main.

**TABLE 9**  
**CLEARANCES OF COLORADO SPRINGS UTILITY**  
**ELECTRIC FACILITIES FROM HAZARDOUS**  
**HAZARDOUS NATURAL GAS LOCATIONS**  
 (SEE NOTE 11)



**EXAMPLE OF HAZARDOUS BOUNDARIES**  
**AT A SERVICE STATION**

<b>Classified Area</b>	<b>Location</b>	<b>Horizontal Clearance</b>	<b>Reference</b>
	Tunnels beneath stockpiles or surge piles	Prohibited within	NESC 127A
Gaseous Hydrogen Systems	Outdoor storage areas of gaseous hydrogen used for supply equipment (generators)	15'	NESC 127G, NFPA 50A-1994
Liquid Hydrogen Systems	Points of connection to liquid hydrogen storage systems; liquid hydrogen storage tanks	25'	NESC 127H, NFPA 50B-1994
Liquid Petroleum Gas (LPG or Propane)	Tanks, loading and unloading areas, vents, relief valves, container filling areas	15' (see Note 1)	NESC 127K, NFPA 58-1992
Natural Gas (Methane) Areas (see Note 2)	Gas pipe connections, valves, gages, meters, and regulators installed above grade	15' (see Note 1)	NESC 127L, NFPA 56-1990
Bulk Oxygen,	Not classified as flammable or combustible	None	NESC 127J

Liquid Nitrogen		(see Note 4)	
Diesel Fuel Oil (see Note 3)	Identified as Class II liquid, not flammable at normal ambients	None (see Note 4)	NESC 127B4

**NOTES:**

- ~~1. These clearances do not apply to portable or mobile DOT cylinders used to store propane (LPG) or CNG or other fuels, but do apply to areas used for container filling.~~
- ~~2. For secondary voltage services and meters (less than 600 volts), a radial separation of 3 feet is allowed. The minimum distance that padmount transformers and generator equipment may be located from any part of a gas meter, gas regulator or gas meter piping is 6 feet provided that a solid masonry wall is built between the two. The masonry wall must be a minimum of 3 feet away from any part of the gas meter, gas regulator or gas meter piping, and at least 6 feet tall by 6 feet wide (or at least as wide as the electric equipment when greater than 6 feet). The 6 foot wall is not required when that distance is 15 feet or greater. If the generator equipment is greater than 6 feet in height the masonry wall must be equal to or greater in height than the equipment.~~
- ~~3. Diesel Fuel Oil (No. 1 or 2): Although considered a “combustible” Class II liquid with a flash point greater than or equal to 100 degrees Fahrenheit, diesel is not classified as a “flammable” liquid. Where stored and dispensed at normal ambient temperatures outdoors with the diesel below its flash point temperature, utility padmount transformers can be installed at standard clearances from diesel tanks and filling ports. Recommended clearance between diesel generators/tanks is 15 feet to permit future change to natural gas or similar fuel without extensive renovation.~~
- ~~4. Standard clearances apply to these non-flammable locations, typically 2 feet minimum horizontal for access and 8 feet horizontal from padmount equipment operating sides for hotsticking.~~

**TABLE 910**

**JOINT TRENCH INSPECTION APPOINTMENT  
SCHEDULING & CANCELLATION CRITERIA**

<b>3 weeks to 4 business days prior to scheduled appointment date</b>	<b>3 business days prior to scheduled appointment date</b>	<b>2 business days prior to scheduled appointment date</b>	<b>1 business day prior to scheduled appointment date</b>	<b>Scheduled appointment date</b>
Call any business day between 7:30 am and 2pm to schedule an appointment	Last day to call for appointment (between 7:30am and 2pm)			
Cancel anytime <b>No fee charged</b>	Cancel anytime and provide an alternate address <b>No fee charged</b>	Cancel anytime = incur <b>Step 2 fee</b> (25% of return trip fee)	Cancel anytime = incur <b>Step 3 fee</b> (50% of return trip fee)	Cancel anytime = incur <b>Full return trip fee charged</b>
	Cancel before 11:00 a.m., no alternate address = incur <b>Step 1 fee</b> (Cancellation fee - 10% of return trip fee)			
	Cancel after 11:00 a.m., no alternate address = incur <b>Step 2 fee</b> (25% of return trip fee)			

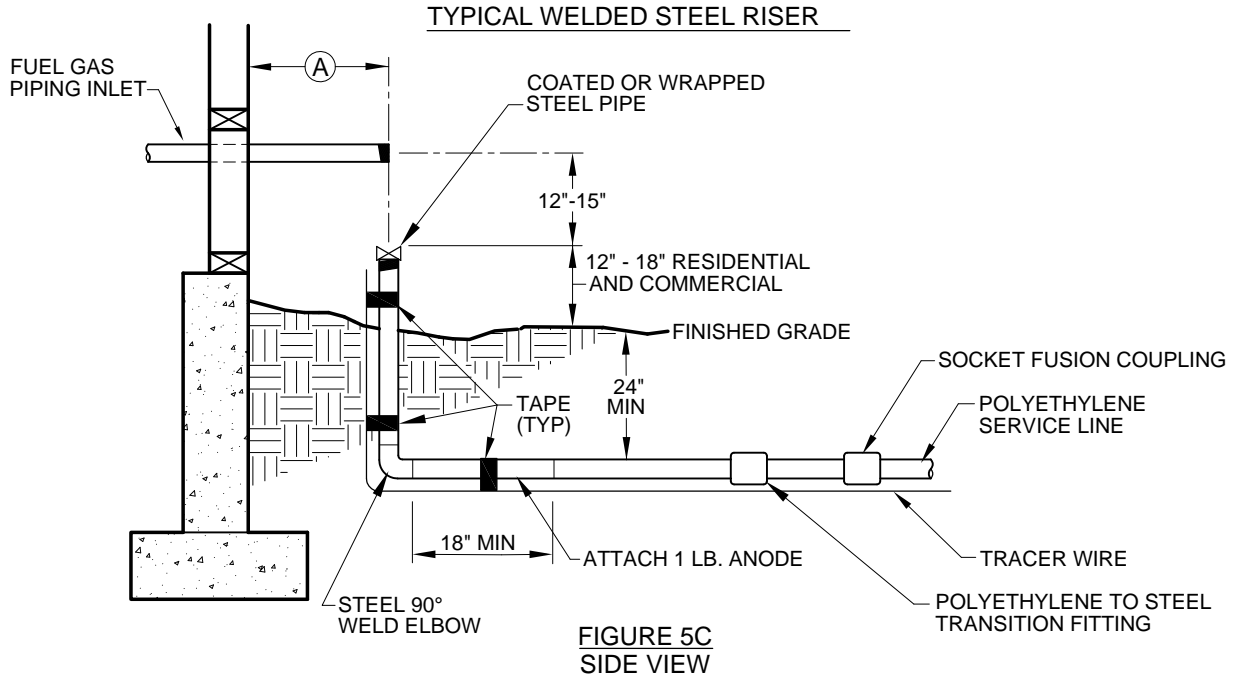
**Notes/OTES:**

1. See 4.04c for Inclement Weather and Show Up Time explanation.

+

2. Once a licensed utility service installer schedules an address for a Joint Trench Service Line, Gas Only Service Line and/or an Electric Only Service Line Inspection and Tie-In appointment, the licensed utility service installer will only be allowed to move and/or reschedule that address appointment one time. At that point, it must be completed on the scheduled date and time or the appointment will “Fail” and incur a return trip fee.

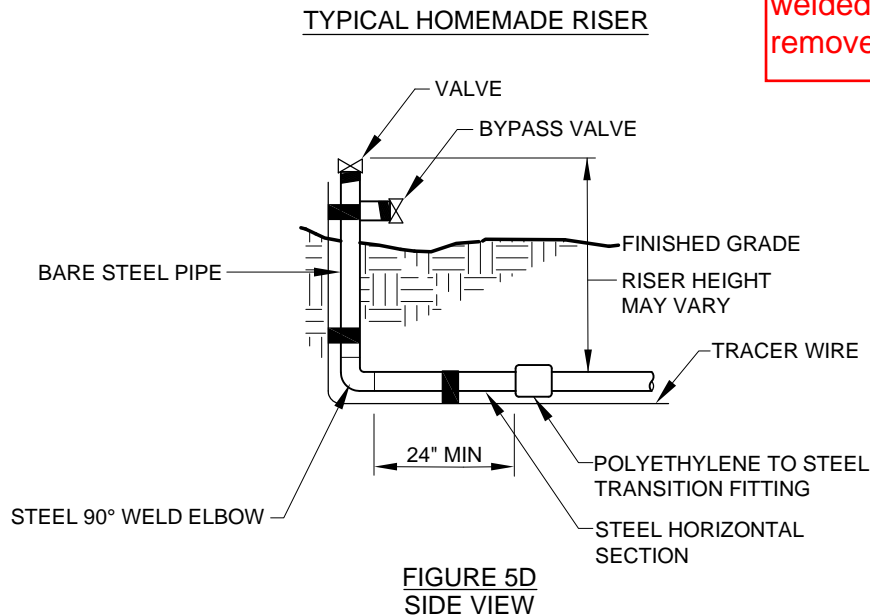
**FIGURE 5**  
SERVICE RISER DETAIL



**NOTES:**

1. Install 1 lb. of Magnesium Thermite weld lead wire to riser for all steel welded risers.
2. Service Riser and Transition Fitting should be supported on well compacted soil.
3. All uncoated portions of the riser, below existing grade, are to be wrapped with primerless tapecoat in accordance with Figure 11.
4. See Figure 6 for A, B & C dimensions.

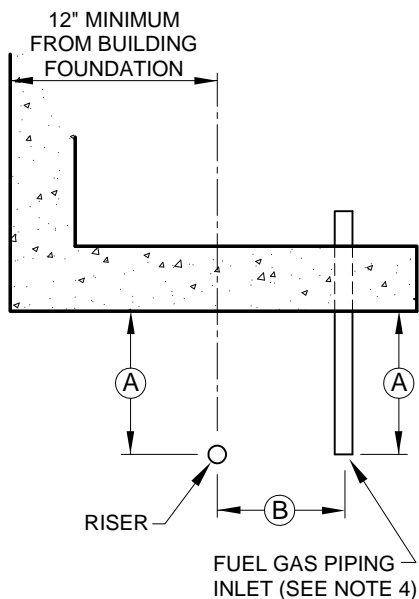
reference to 2"  
welded steel risers  
removed



**NOTES:**

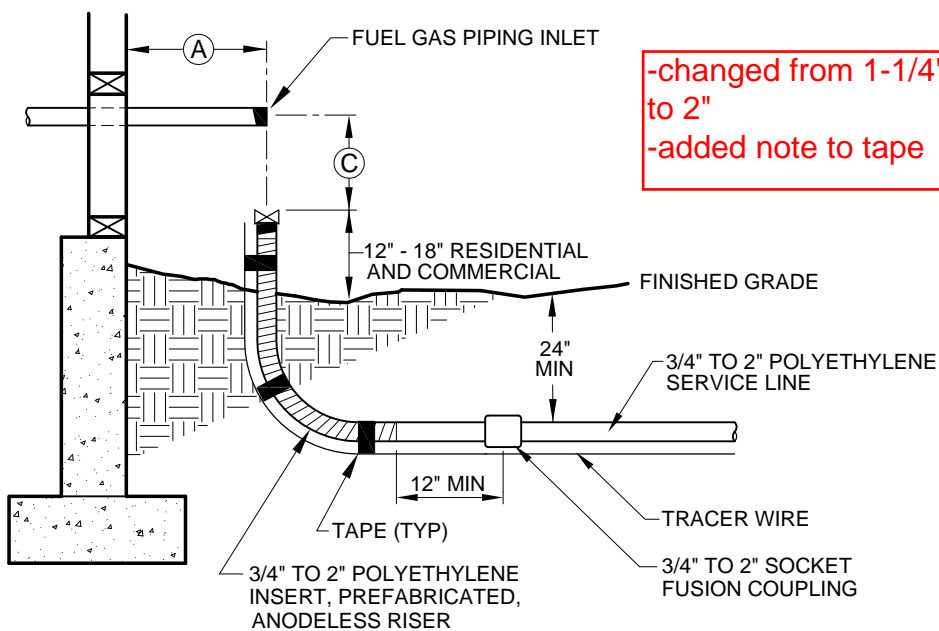
1. All welded gas service risers shall be fabricated by the Colorado Springs Utilities Machine Weld Shop (see 4.06b).
2. If installing a welded steel riser, Colorado Springs Utilities Quality Control/ Inspections must be contacted a minimum of 5 working days prior to the scheduled appointment so arrangements can be made for a Colorado Springs Utilities welder to be on site for the scheduled appointment to weld the steel valve onto the riser.
3. All uncoated portions of the riser, below existing grade, are to be primed and wrapped in accordance with Figure 11.

**FIGURE 5**  
SERVICE RISER LOCATION DETAILS



**FIGURE 5A**  
TOP VIEW

TYPICAL 3/4" TO 2" IPS POLYETHYLENE



-changed from 1-1/4" to 2"  
-added note to tape

**FIGURE 5B**  
SIDE VIEW

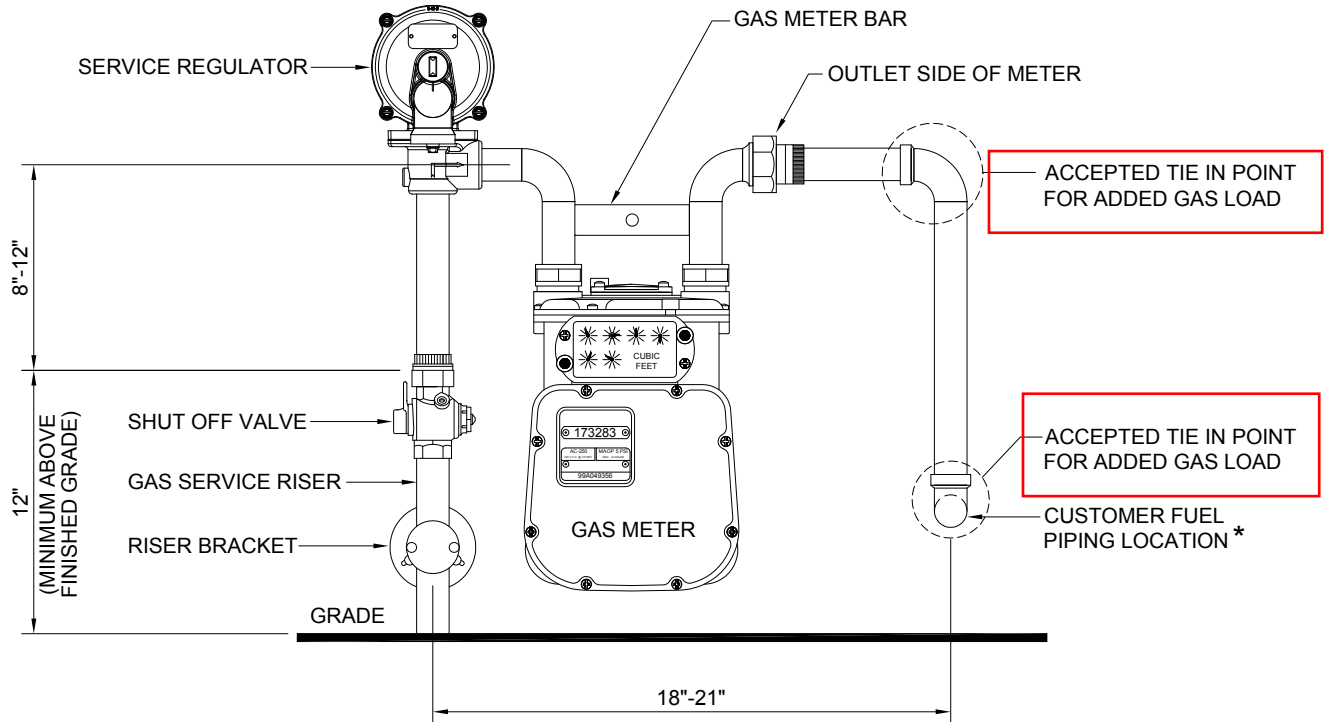
**NOTES:**

1. After back-filling, the above ground portion of the riser shall be vertical.
2. Starting at the bottom of the anodeless riser, the entire casing shall be field wrapped with an approved UV resistant tape in accordance with Figure 11. The recommended overlap is 1" or 20% of the tape width, whichever is greater.
3. Contact Colorado Springs Utilities at 668-3570 when expected load exceeds 1,400,001 BTH/HR.
4. All horizontal piping shall be properly secured (i.e., unistrut) to building or structure, as approved by utility inspector.
5. See Figure 6 for A, B & C dimensions.



**FIGURE 8**  
TYPICAL METER SETS

**FIGURE 8A**  
TYPICAL RESIDENTIAL METER SET  
0 - 390,000 (BTU/HR)



**NOTE:**  
SEE TABLE 7 FOR APPROVED MANUFACTURERS  
FOR TYPICAL METER SET MATERIALS.

**METER LOOP SPECIFICATIONS:**

APPLICATION: TOTAL CONNECTED LOAD OF 390,000 BTU/HR OR LESS

GAS SERVICE RISER: 7" - 10" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

FUEL LINE STUB: 7" - 10" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

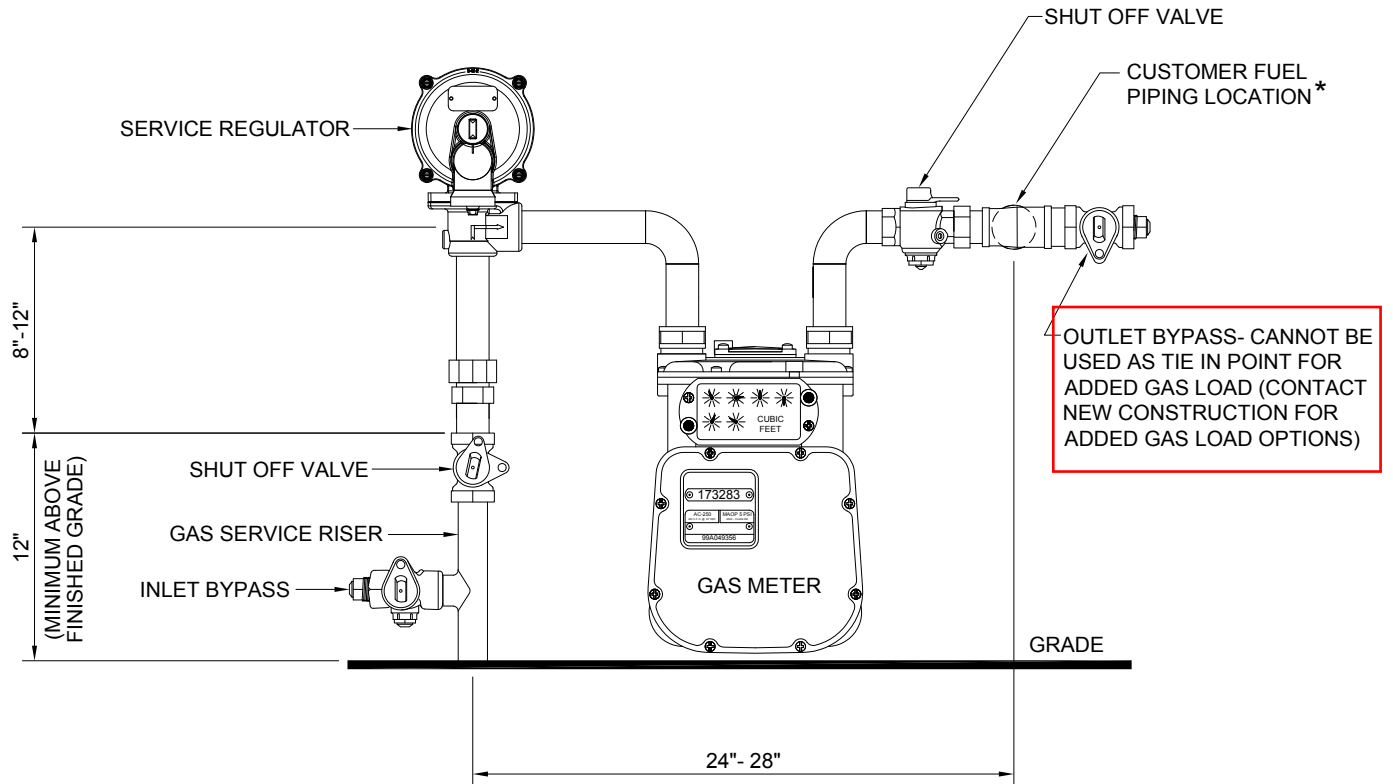
HORIZONTAL SPREAD: 18" - 21" (CENTER OF GAS RISER TO CENTER OF FUEL LINE)

VERTICAL SPREAD: 8" - 12" (TOP OF GAS RISER VALVE TO FUEL LINE INLET)

GAS RISER SHUT OFF VALVE: NEED TO BE A MINIMUM OF 12" FROM FINISHED GRADE

\* RECOMMENDED DISTANCE FROM FINISHED EXTERIOR WALL TO END OF CUSTOMER FUEL PIPING IS 1" SHORTER THAN CENTER OF RISER VALVE.

**FIGURE 8B**  
390,001 - 910,000 (BTU/HR)



**NOTE:**  
SEE TABLE 7 FOR APPROVED MANUFACTURERS  
FOR TYPICAL METER SET MATERIALS.

**NOTE:**  
RISER BRACKETS ARE NOT REQUIRED ON COMMERCIAL  
INSTALLATIONS (PENDING FINAL APPROVAL FROM  
FIELD SERVICES)

**METER LOOP SPECIFICATIONS:**

APPLICATION: TOTAL CONNECTED LOAD OF 390,001 - 910,000 BTU/HR OR LESS

GAS SERVICE RISER: 7" - 10" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

FUEL LINE STUB: 7" - 10" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

HORIZONTAL SPREAD: 24" - 28" (CENTER OF GAS RISER TO CENTER OF FUEL LINE)

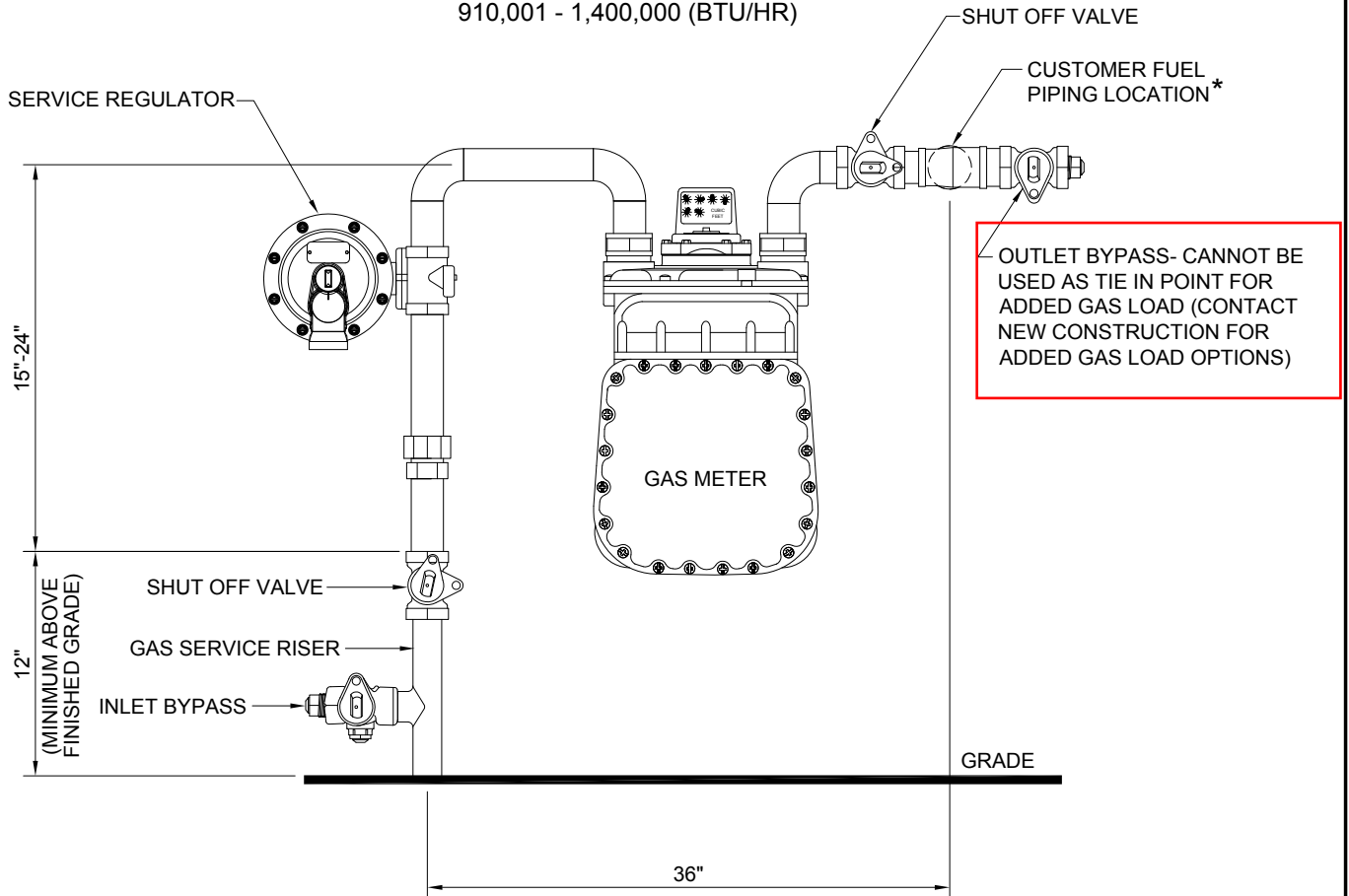
VERTICAL SPREAD: 8" - 12" (TOP OF GAS RISER VALVE TO FUEL LINE INLET)

GAS RISER SHUT OFF VALVE: NEED TO BE A MINIMUM OF 12" FROM FINISHED GRADE

\* RECOMMENDED DISTANCE FROM FINISHED EXTERIOR WALL TO END OF CUSTOMER FUEL PIPING IS 1" SHORTER THAN CENTER OF RISER VALVE.

FIGURE 8C

910,001 - 1,400,000 (BTU/HR)



**NOTE:**  
SEE TABLE 7 FOR APPROVED MANUFACTURERS  
FOR TYPICAL METER SET MATERIALS.

**NOTE:**  
RISER BRACKETS ARE NOT REQUIRED ON COMMERCIAL  
INSTALLATIONS (PENDING FINAL APPROVAL FROM  
FIELD SERVICES)

**METER LOOP SPECIFICATIONS:**

APPLICATION: TOTAL CONNECTED LOAD OF 910,001 - 1,400,000 BTU/HR OR LESS

GAS SERVICE RISER: 7" - 10" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

FUEL LINE STUB: 7" - 10" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

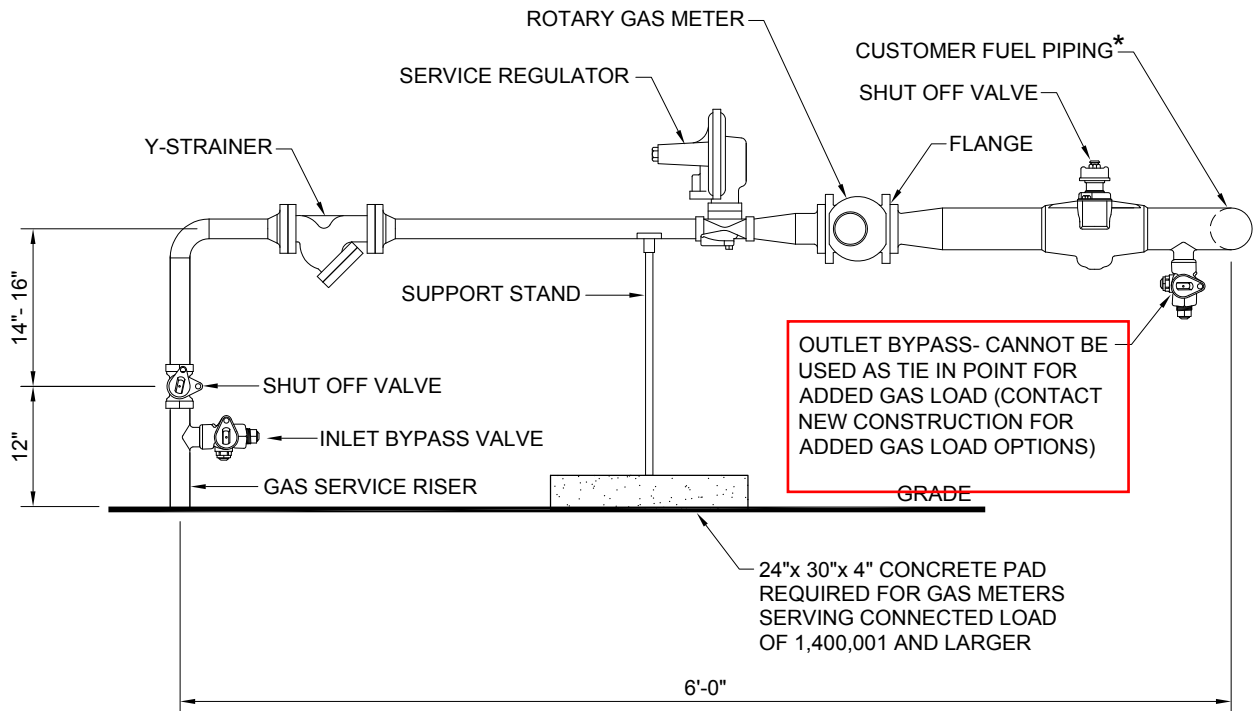
HORIZONTAL SPREAD: 36" (CENTER OF GAS RISER TO CENTER OF FUEL LINE)

VERTICAL SPREAD: 15" - 24" (TOP OF GAS RISER VALVE TO FUEL LINE INLET)

GAS RISER SHUT OFF VALVE: NEED TO BE A MINIMUM OF 12" FROM FINISHED GRADE

\* RECOMMENDED DISTANCE FROM FINISHED EXTERIOR WALL TO END OF CUSTOMER FUEL PIPING  
IS 1" SHORTER THAN CENTER OF RISER VALVE.

**FIGURE 8D**  
**TYPICAL COMMERCIAL METER SET**  
**1,400,001 - 3,500,000 (BTU/HR)**



**NOTE:**  
 RISER BRACKETS ARE NOT REQUIRED ON COMMERCIAL  
 INSTALLATIONS (PENDING FINAL APPROVAL FROM  
 FIELD SERVICES)

**METER LOOP SPECIFICATIONS:**

APPLICATION: TOTAL CONNECTED LOAD OF 1,400,001 - 3,500,000 BTU/HR OR LESS

GAS SERVICE RISER: 16" - 18" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

FUEL LINE STUB: 16" - 18" OUT FROM THE FINAL EXTERIOR FINISHED SURFACE

HORIZONTAL SPREAD: 6' (CENTER OF GAS RISER TO CENTER OF FUEL LINE)

VERTICAL SPREAD: 14" - 16" (TOP OF GAS RISER VALVE TO FUEL LINE INLET)

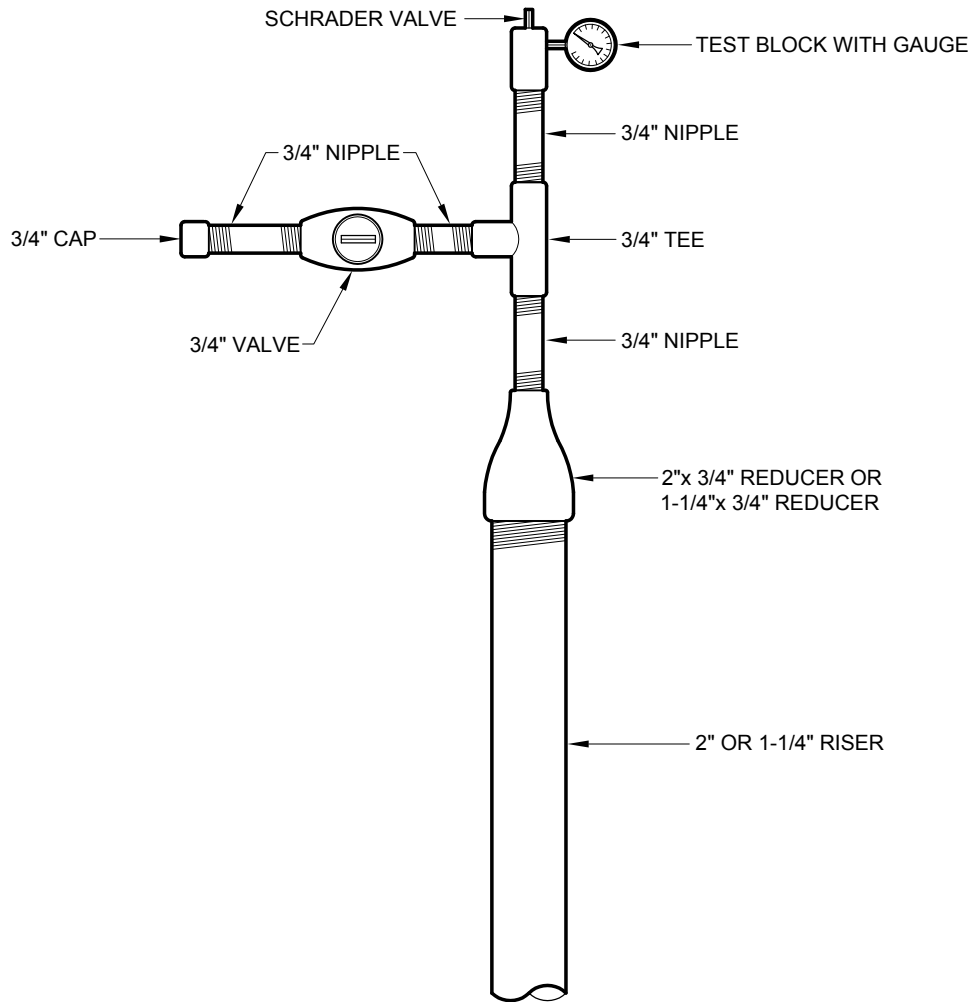
GAS RISER SHUT OFF VALVE: NEED TO BE A MINIMUM OF 12" FROM FINISHED GRADE

\* RECOMMENDED DISTANCE FROM FINISHED EXTERIOR WALL TO END OF CUSTOMER FUEL PIPING IS 1" SHORTER THAN CENTER OF RISER VALVE.

**FIGURE 14**

**REQUIRED AIR PRESSURE TEST GAUGE &  
BLOW DOWN ASSEMBLY**

new figure



**NOTE:**

This assembly shall be provided by the Licensed Utility Service Installer on all 1-1/4" or 2" welded steel or anodeless gas service riser installations.

# COLORADO SPRINGS UTILITIES GAS LINE EXTENSION/SERVICE INSTALLATION

## Phone Numbers and Contact Information

<b>P L A N N I N G</b>
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### Gas Plan Review

Field Engineering North.....668-  
59288707

—Field Engineering South.....668-  
55644083

—**Customer Contract Administration— Gas Contracts & Refunds**.....668-  
81113522

**Utilities Development Services** 668-8259

### Underground Utility Line Locations

Colorado 811/UNCC/Before you dig (All Colorado Utilities) - Call 32 business days before digging.....  
.....811

Central Locating Dispatch (For Design of Colorado Springs Utilities gas, electric, water and wastewater)  
Main Number.....668-7205

<b>D E S I G N</b>
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### FIMS

Service Lines/ Plat Cards- Records Management .....668-4405  
Land Base Maps, Plat Maps.....668-833268  
Utilities Addressing Plan and Utilities Design CAD Files.....668-8340

### Design of Gas Main Line Extensions

Field Engineering North.....668-  
59288707

—Field Engineering South.....668-  
55644083

### North Workcenter Field Engineering

**7710 Durant Drive, Colorado Springs, CO 80947-2150/ Fax: 719-668-4998**

<u>Name</u>	<u>Title</u>	<u>Office</u>	<u>Cell</u>
<u>Tim Benedict</u>	<u>Field Engineering Supervisor</u>	<u>719-668-3574</u>	<u>719-661-5505</u>
<u>Anne Aldrich</u>	<u>Project Engineer</u>	<u>719-668-8707</u>	<u>719-499-6260</u>
<u>Angela Buchanan</u>	<u>Field Engineer</u>	<u>719-668-8330</u>	<u>719-499-5465</u>
<u>J.C. Butterfield</u>	<u>Field Engineer</u>	<u>719-668-5618</u>	<u>719-650-3485</u>
<u>Janis Iverts</u>	<u>Field Engineer</u>	<u>719-668-4983</u>	<u>719-351-4527</u>
<u>Todd Sturtevant</u>	<u>Field Engineer</u>	<u>719-668-3556</u>	<u>719-440-9975</u>
<u>Ben Schmitt</u>	<u>Field Engineer</u>	<u>719-668-4462</u>	<u>719-233-9302</u>
<u>Tim Wendt</u>	<u>Field Engineer</u>	<u>719-668-4962</u>	<u>719-237-7968</u>

### South Workcenter Field Engineering

**1521 Hancock Expressway, Colorado Springs, CO 80947-1812/ Fax: 719-668-5956**

<u>Name</u>	<u>Title</u>	<u>Office</u>	<u>Cell</u>
<u>Dan Skokan</u>	<u>Field Engineering Supervisor</u>	<u>719-668-4978</u>	<u>719-659-1973</u>
<u>Dee Dee Brook</u>	<u>Field Engineer</u>	<u>719-668-4510</u>	<u>719-499-6174</u>

<a href="#">Tony Colvin</a>	<a href="#">Field Engineer</a>	<a href="#">719-668-5768</a>	<a href="#">719-648-0869</a>
<a href="#">Rob Estes</a>	<a href="#">Field Engineer</a>	<a href="#">719-668-5904</a>	<a href="#">719-649-3228</a>
<a href="#">Ginny Halvorson</a>	<a href="#">Field Engineer</a>	<a href="#">719-668-5567</a>	<a href="#">719-491-8420</a>
<a href="#">Mary Hoaglund</a>	<a href="#">Project Manager</a>	<a href="#">719-668-4083</a>	<a href="#">719-650-9151</a>
<a href="#">Cindy-Lou Hyde</a>	<a href="#">Field Engineer</a>	<a href="#">719-668-5887</a>	<a href="#">719-661-3880</a>
<a href="#">Dawna Schawe</a>	<a href="#">Field Engineer</a>	<a href="#">719-668-5572</a>	<a href="#">719-649-3274</a>

**Gas Main Pressure**.....668-3524

**Gas Service Stub Location**.....668-3524

**Elevated Delivery Pressure & Propane Conversion Requests**

Field Engineering North.....668-

[59288707](#)

—Field Engineering South.....668-

[55644083](#)

<b>C O N S T R U C T I O N</b>
--------------------------------

.....668-

55[5799](#)

**Colorado Springs Utilities Construction Scheduling**.....668-3525

**Quality Control & Inspections**.....668-

[56383667](#)

<b>S E R V I C E I N S T A L L A T I O N</b>
--

**Building Permits (Regional Building Department)**.....327-2880

**Houseline Inspections (Regional Building Department)**.....327-2883

Gas Meter Inspections/Scheduling.....668-7350

**Colorado Springs Utilities Machine Weld Shop**.....668-5384

**North Energy Construction Operations and Maintenance Department Manager**.....668-

[3506630](#)

Administrative Support.....668-7646

**South Energy Construction Operations and Maintenance Department Manager**.....668-

[3630506](#)

Administrative Support.....668-4608

**Appointment Scheduling Gas/Electric Service Inspection & Tie-Ins**.....668-3524

**Infrastructure Records Inspections**.....[668-4426](#)

**Gas Field Service Inspections**.....668-73504

**Advanced Metering Technologies Group (AMT)**.....668-

[5525355025](#)

Supervisor.....668-

[55493505](#)

<b>O T H E R T E L E P H O N E N U M B E R S</b>
--

**Colorado Springs Utilities Customer Service**.....448-4800

<b>Gas Utility Emergencies</b> .....	448-4800
<b>Damage Claims</b> .....	385-5960
<b>General Accounting</b> (Inquiry for Time-and-Material Refunds) .....	668-8550
<del>Colorado Springs Utilities Pricing &amp; Rates</del> .....	<del>668-8545</del>
<b>City of Colorado Springs Revocable Permit Coordinator</b> .....	385- 5355083
<b><u>Warehouse</u></b>	
<u>North Work Center</u> .....	<u>668-4981</u>
<u>South Work Center</u> .....	<u>668-5550</u>

**SERVICE AREA MAP CONTACTS**



**NORTH WORK CENTER**  
 7710 DURANT DRIVE, P.O. BOX 1103,  
 MAIL CODE 2150  
 COLORADO SPRINGS, CO 80947-2150  
 MAIN PHONE: 668-5928  
 FIELD ENGINEERING FAX: 668-4998

TIM BENEDICT  
 NORTH FIELD ENGINEERING  
 SUPERVISOR  
 668-3574  
 661-5505

ANNE ALDRICH  
 PROJECT ENGINEER  
 668-8707  
 499-6260

ANGELA BUCHANAN  
 668-8330  
 499-5465

TIM WENDT  
 668-4962  
 237-7968

JANIS IVERTS  
 668-4983  
 351-4527

BEN SCHMITT  
 668-4462  
 233-9302



TODD STURTEVANT  
 668-3556  
 440-9975

CINDY-LOU HYDE  
 668-5887  
 661-3880

DAWNA SCHAWA  
 668-5572  
 649-3274

J.C. BUTTERFIELD  
 668-5618  
 650-3485

**SOUTH WORK CENTER**  
 1521 HANCOCK EXPRESSWAY,  
 P.O. BOX 1103, MAIL CODE 1812  
 COLORADO SPRINGS, CO  
 80947-1812

MAIN PHONE: 668-5564  
 FIELD ENGINEERING FAX: 668-5956

DAN SKOKAN  
 SOUTH FIELD ENGINEERING  
 SUPERVISOR  
 668-4978  
 659-1973

MARY HOAGLUND  
 PROJECT MANAGER  
 668-4083  
 650-9151

MARY HOAGLUND  
 668-4083  
 650-9151

GINNY HALVORSON  
 668-5567  
 491-8420

DEE DEE BROOK  
 668-4510  
 499-6174

TONY COLVIN  
 668-5768  
 648-0869

ROB ESTES  
 668-5904  
 649-3228

ELECTRIC/WATER/GAS EMERGENCY (ONLY):  
 DISPATCH 668-8800  
 CUSTOMER SERVICE 448-4800  
 ADDRESS: 111 S. CASCADE,  
 COLORADO SPRINGS, CO 80903  
 HOURS: M-F 7am-7pm / SAT 8am-12pm  
 CALL BEFORE U-DIG: 811

